Caught In The Net Of Zero-Tolerance: The Effect Of The Criminal Justice Response To Partner Violence

By

Linda Patricia Wood

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MASTER OF ARTS

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BY

LINDA PATRICIA WOOD

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirement of the degree

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Abstract

The impetus for the present study stems from the competing interpretations that have emerged over the effect of the criminal justice response to partner violence in the form of a 'zero-tolerance' policy implemented by the Winnipeg Police Service in July of 1993. Using data collected from Police Incident Reports on cases of women and men charged with criminal acts of violence over a five year period (1991 to 1995), three questions are addressed: Are there differences between partner and non-partner violence cases in terms of their processing by the criminal justice system? Are there differences in the processing and sentencing of partner violence cases before and after the implementation of the zero-tolerance policy? Are there differences in the processing and sentencing of women and men charged with partner violence? Regarding differences between partner and non-partner violence cases, the results show that partner violence cases had a significantly higher incidence of case attrition than non-partner violence cases. The analysis also shows that partner violence was qualitatively different from non-partner violence, particularly when the latter group was broken down according to the social relationship between the accused and victim (friends or acquaintances and strangers). Regarding differences between partner violence cases before and after the zero-tolerance policy, the results indicate that while partner violence cases where charges were laid after the zero-tolerance policy had a significantly higher incidence of attrition than partner violence cases where charges were laid before the policy, there were no significant qualitative differences between partner violence cases occurring before and after the implementation of the policy and no differences were

found in the sentencing of cases before and after the policy. Finally, regarding gender differences, the results indicate that contrary to Conflict Tactics Scale research, men's and women's partner violence is asymmetrical; that is, women are not "men's equals in violence." Together, these findings raise questions about the effectiveness of the zero-tolerance policy in responding to partner violence and suggest some support for the position that zero-tolerance has had a "net widening" effect.

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To all the women who suffer or have suffered abuse at the hands of their partners, *your strength inspires me.*

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Introduction

Over the past thirty years, feminists have been successful in their efforts to force the issue of wife abuse onto the political and public stage and establish social programs and services that provide support for abused women and their children.[1] While such programs have been heralded as a step forward for the Battered Women's Movement, an intense debate remains within the feminist community over the government response to partner violence in the form of criminal justice intervention. One policy in particular which has received considerable criticism is the Winnipeg Police Service's zero-tolerance policy toward partner violence. In light of the controversy surrounding this issue, the purpose of this thesis will be to examine the effect of the Winnipeg Police Service's zero-tolerance policy on the criminal justice response to partner violence.

Since the early 1970s, 'wife abuse' has gradually been transformed from a personal and private trouble into a public and political issue.[2] In their struggle to have wife abuse recognized as a social problem, feminists implicated the state, particularly the law, in

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[1] The term 'feminist' will be used to refer to feminist scholars, women's advocates, women's workers, shelter workers and women's groups.

[2] One consequence of state recognition of wife abuse as a public issue has been the shift in terminology to gender-neutral terms such as 'domestic violence,' 'partner violence,' 'intimate violence,' 'interspousal violence,' 'spousal abuse' and 'family violence.' The terminology employed for the present study will be 'partner violence' or 'domestic violence,' as this denotes violence between married, dating, cohabiting or separated or divorced partners and refers to violence by men and women. At times, however, the terms 'spousal assault' or 'wife abuse' will be used to remain consistent with the terminology used by other writers.

historically condoning and legitimating violence against women and directed some of their efforts toward legal solutions to the problem of wife abuse (Currie 1998). In particular, they called attention to the police practice of treating assaults in the home as "private disturbances" and argued that violence "in the home" should be treated as seriously as violence "on the street."

In response to the pressure from feminists, then Solicitor General, Robert Kaplan, wrote to police chiefs across Canada in 1983 encouraging police departments to adopt mandatory charging policies in cases of wife assault. Most provinces adopted their own version of the Solicitor's General directive. Manitoba was the first province in Canada to embrace the federal directive. In February of 1983, Manitoba's then Attorney-General, Roland Penner, issued a directive to police officers to institute criminal proceedings in all cases of spousal assault, regardless of the relationship between the accused and victim, and instructed Crown Attorneys to prosecute these cases vigorously. Jane Ursel (1998b) notes that because of this directive the number of arrests increased, the private nature of wife abuse was made public and widespread public support was generated for the directive. However, feminists remained uncertain about the quality of justice provided to wife abuse victims and pointed out that vigorous prosecution did little to address the complex problems which arise when the victim is emotionally and financially dependent on her assailant (Ursel 1992b). The result was the implementation of a specialized Family Violence Court in September of 1990. In November of 1990, only two months after the Family Violence Court began operation, the province conducted an extensive examination of the justice system's response to domestic

violence. The Domestic Violence Review (see: Pedlar 1991) revealed numerous inconsistencies with the enforcement of the 1983 directive. In response, the Winnipeg Police Service implemented a 'zero-tolerance' policy toward partner violence in July of 1993. The aim of the zero-tolerance policy was to remove the burden of laying charges from victims of partner violence (who are largely women) and transfer the responsibility onto the police. The policy instructs police officers to treat partner abuse as a serious crime and lay charges in all cases where there are reasonable and probable grounds to believe that an assault has occurred, regardless of the wishes of the victim and even in the absence of visible injuries or independent witnesses (Winnipeg Police Department 1993). This meant that all discretion was effectively removed from the police and transferred to the Crown attorneys in the Family Violence Unit of the Public Prosecutions Division of the Manitoba Department of Justice.

While the strategy of criminalizing the problem of wife abuse was seen by some commentators as an improvement, mandatory charging remains a highly contentious issue. More specifically, the implementation of the zero-tolerance policy in Winnipeg has raised questions among feminists and victims/survivors about the effect of the criminal justice response to the problem of wife abuse. One consequence of the policy has been an increase in the number of men – and women – charged with domestic violence against their spouses.[3] Whereas only 156 women were charged with domestic violence in Winnipeg in 1992, within a three-month period in 1993, 190 women were charged with domestic violence (*Winnipeg*

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[3] See, for example: Paul Wiecek, "Hard Line On Abuse Nets More Women: Numbers Up As Less Evidence Required For Arrest," *Winnipeg Free Press*, 1994; Paul Wiecek, "Woman Charged For Pointing Gun to End Beating," *Winnipeg Free Press*, 18 March 1992.

Free Press, 20 December 1993).

While writers such as Ursel (1998a) claim that the increase in the number of charges of domestic violence following the implementation of the zero-tolerance policy is evidence of its effectiveness, critics such as Laureen Snider (1995) would argue that the policy has resulted in a "net-widening," whereby more persons are now being brought into the criminal justice system on charges of domestic violence. The increase in the number of women in Winnipeg charged with domestic violence, in particular, is believed to be the result of the zero-tolerance policy's lower standard for reasonable and probable grounds. Critics have also noted problems in situations where each of the parties alleges to have been assaulted by the other partner. In these cases, police officers are directed to charge both parties. The police practice of double-charging has led to concerns being raised by feminists about the nature of justice available to women: they question why a policy which was intended to help battered women has had the adverse effect of criminalizing them?

At the same time, the increase in the number of women being charged with domestic violence has led to concerns being raised in the media and among the public over whether women are becoming increasingly violent.[4] Researchers employing the Conflict Tactics Scale as a measure for partner violence would interpret this increase as evidence that the criminal justice system is working more fairly. Women who are seen as "men's equals in violence"

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[4] See, for example: Free Press News Services, "Report Says Violence By Women Up: More Abuse Victims Men," *Winnipeg Free Press*, 8 March 1993; Paul Wiecek, "Battered Husbands Emerge As Zero Tolerance Enforced." *Winnipeg Free Press*, 1 December 1993; Bill Redekop, "Court Cases Soar: Who's Beating Whom Under Zero Tolerance?" *Winnipeg Free Press*, 20 December 1993.

are now being charged alongside men for their violent behaviour. The Conflict Tactics Scale, designed to measure techniques for resolving family disputes, has consistently produced equivalent rates of women's and men's violence and allowed researchers to claim a *sexual symmetry* in partner violence. The CTS has been criticized, however, for failing to consider the social context of the violent act and the meaning, motive and outcome (i.e., injury) of the violence (see, for example: Browning & Dutton 1986; DeKeseredy & MacLean 1998; Dobash & Dobash 1992; Ferraro & Johnson 1983; Schwartz & DeKeseredy 1993; Johnson 1996). Gendered power imbalances in marriage and in society that grant men more authority than women are ignored altogether (Johnson 1996). Instead, the Conflict Tactics Scale assumes that men and women share equal power and resources in families and in society. While the claim that women and men are "equals in violence" is one that is highly contested by feminist writers, the lack of any in depth research on the qualitative nature of partner violence prevents us from challenging it.

The present study seeks to resolve competing interpretations that have emerged over the effect of the criminal justice response to partner violence. In particular, the main purpose of this thesis is to examine the effect of the Winnipeg Police Service's zero-tolerance policy on the criminal justice response to partner violence. This thesis is divided into six chapters. Chapter One provides a history of the Winnipeg Police Service's zero-tolerance policy and the Manitoba Family Violence Court, including the social and political climate in which they emerged and the intent behind their introduction. As well, this chapter considers the assessments of the Manitoba criminal justice system's response to partner violence. Chapter

Two provides the methodology for the thesis, including the main questions to be addressed, the sampling design and the method for data collection. Chapters Three, Four and Five contain the findings of the analyses of data. While Chapter Three focuses on a comparison of partner versus non-partner violence cases, Chapter Four examines partner violence cases where charges were laid before and after the zero-tolerance policy. Chapter Five considers the effect of the zero-tolerance policy on men and women charged with partner violence in light of the claim that women are men's equals in violence. The Concluding chapter discusses the implications of the present study and offers suggestions for future research.

Chapter One

A History of the Criminal Justice Response to Partner Violence

In their struggle for the recognition of wife abuse as a social problem, feminists drew attention to the historic treatment of wife abuse as a "private matter" by the police and the courts. As Ursel (1998b: 74) notes: "In the past, police frequently did not respond, were slow arriving at the scene, reluctant to believe victims, and preferred walking assailants around the block to cool them off before warning both husband and wife to behave." Police officers seldom laid charges unless the victim pursued her complaint and Crown Attorneys often dropped cases, regardless of significant evidence that a serious assault had occurred (McGillivray & Comaskey 1998). A London, Ontario study conducted by Peter Jaffe, David Wolfe, Anne Telford and Gary Austin (1986), for instance, found that prior to the implementation of the London Police Department's mandatory charging policy, only 3 percent of domestic assault cases resulted in charges laid by the police.

While there was unequivocal agreement among feminists as to the widespread and pressing nature of the problem of wife abuse, there was considerable disagreement as to how best to proceed. As Dawn Currie (1998) notes, concerns emerged not only about the merits of resorting to a system which is patriarchal at all stages, but also about the fundamental relationship between feminism and social change. While some feminists used evidence of both the prevalence of wife abuse and the historic lack of response on the part of the state and criminal justice system as an impetus for action, others remained skeptical about the

potential of law to promote the concerns of women on the issue of wife abuse. These divisions on the issue of wife abuse are part of a larger debate within feminism, particularly among academic feminists, over the desirability of engagement with the state. On one side of the debate are those feminists who see potential wedges in the state and law that allow for a meaningful response to issues concerning women (see, for example: Lacombe 1998; Ursel 1998a; Ursel 1998b; Ursel & Brickey 1996). For these writers, contradictions exist in the patriarchal dynamics of the state that create a site of struggle. On the other side of the debate are those feminists who maintain that the use of the law in advancing women's concerns has resulted in the co-optation, institutionalization, accommodation, deradicalization, repackaging and depoliticization of women's issues (see, for example: Barnsley 1988; Currie 1990; Currie & MacLean 1992; Hilton 1988; Pitch 1985; Smart 1989; Snider 1995; Valverde 1987). While there are points of disagreement among these approaches, as Elizabeth Comack (1993) notes, it is important to remember that they are not entirely opposed to each other.[5]

Those feminists who favoured using the law to promote women's concerns directed their attention toward state recognition of wife abuse as a crime and the equitable treatment of cases of partner abuse by the criminal justice system. They argued that wife abuse was a "crime like any other" and, as such, should be dealt with by criminal charges. Currie (1998) notes that even feminists who did not advocate a punitive approach to male violence argued in favour of using the criminal law for its symbolic importance. According to Ursel (1998b), feminists proposed three basic strategies to respond to the issue of violence against women:

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[5] Comack (1993) notes, for example, that both Ursel and Snider adopt a socialist feminist approach in their work.

police must charge in cases of assault or abuse regardless of the relationship between the victim and perpetrator; Crown Attorneys must treat these cases seriously and pursue prosecution; and sentencing must reflect the gravity of the offence.

While the argument for legal remedies was an appealing one, the desirability of criminalizing wife abuse remained a highly controversial issue (see, for example: Snider 1995; Pitch 1985; MacLeod & Shin 1990; Pratt 1995; Miedema & Wachholz 1998; LaRocque 1995; and McGillivray & Comaskey 1999). According to Walter DeKeseredy and Linda MacLeod (1997), feminists never intended to direct their efforts toward legal solutions to end male violence against women. For example, in a 1981 meeting organized by the Canadian Advisory Council on the Status of Women (CACSW), women's groups debated the benefits of criminalization. Critics raised the following four points: 1. criminal justice intervention contains a problem by redefining it within the limits of the law; 2. criminal justice is an adversarial process rooted in punishment, hierarchy and dependence – factors which engender abuse; 3. criminal justice is a system based on intervention into distinct events and specific acts; and 4. the problems of abused women are not solely legal and, as such, have no place in the criminal justice system (DeKeseredy & MacLeod 1997).

The purpose of this chapter is to provide a context in which to situate the debates which have transpired over the criminal justice response to domestic violence. A specific focus will be on the history of reforms in the province of Manitoba. The discussion will be divided into two parts: the first will consider the developments which have occurred in Manitoba over the past two decades, while the second will review the assessments of these

reforms – with particular attention to the zero-tolerance policy – as they appeared in the literature and the media.

I. HISTORY OF THE MANITOBA MODEL

Mandatory charging

One of the most controversial strategies proposed by the state to respond to the problem of wife abuse has been mandatory charging policies. In response to pressure from feminists in the early 1980s to recognize wife abuse as a "crime like any other," an intense debate in the House of Commons in 1982 resulted in the House adopting a directive which would encourage police officers in Canada to lay charges in all cases of partner abuse where there are reasonable and probable grounds to believe that an offence had occurred (Faubert & Hinch 1996). Following the debate, on July 15, 1982, Robert Kaplan, the federal Solicitor General at the time, sent a letter to the executive director of the Canadian Association of Chiefs of Police encouraging police departments across Canada to embrace this directive for cases of partner violence (Faubert & Hinch 1996).

Mandatory charging policies were "intended to improve the way the justice system dealt with cases of domestic violence, and to increase the number of charges laid and the number of successful prosecutions" (Johnson 1996: 210). By sending the message to women that their complaints would be taken seriously, mandatory charging policies were supposed to encourage women to report partner violence. According to Holly Johnson (1996),

mandatory charging is premised on the belief that victims of domestic violence (who are predominantly women) are particularly vulnerable to violence and lack the power either to stop the violence or to change the behaviour of the abuser. Because of this, the power of the police is required to interrupt the "cycle of violence" by resolving the violent episode. Before mandatory charging policies, the burden to lay charges against an abusive husband was placed on the woman. Because of women's fear of reprisal from their abusive husbands or because of their intimidation in the presence of their abusers, charges laid by women were very seldom, unless there was evidence of serious injuries. As Johnson (1996) notes, mandatory charging policies were therefore intended to provide women with both immediate protection from male violence and with an opportunity to leave the relationship if they so choose. Most police departments across Canada implemented their own version of the Solicitor's General directive. The Manitoba government was the first province to embrace this initiative. Currie (1998) suggests that the swiftness with which the government embraced wife abuse as a crime is evidence of the power of the lobby efforts of feminists.

On February 11, 1983, Manitoba's then Attorney-General, Roland Penner, issued a directive to all police agencies in the province to lay charges in all cases of partner abuse where there are reasonable and probable grounds to believe that an assault had occurred, regardless of the wishes of the victim. The result was a dramatic increase in the number of family violence cases entering the courts – from 629 in 1983 to 1137 in 1989 (Ursel 1998a). As the number of wife abuse and family violence cases proceeding to court increased, Crown Attorneys were advised to adopt 'no-drop' policies which encouraged vigorous prosecution

of all partner violence cases.

With the increased media exposure following the policy, the court system came under scrutiny from feminists who argued that treating wife abuse cases like any other crimes through vigorous prosecution did not address problems such as the continued lack of sensitivity on the part of the police and courts, the re-victimization of victims through the court process, the leniency of sentences for wife batterers and the ineffectiveness of restraining orders. These same concerns were expressed by women's groups, victims/survivors and members of the opposition in several media reports in the late 1980s.[6] In general, these groups pointed out that the courts have been slow to listen to the message that wife abuse is a serious crime and have failed at every opportunity to communicate this message to the public. According to Ursel (1992b), victims' advocates raised the following concerns: a large proportion of wife abuse cases end in a stay of proceedings and, therefore, never proceed to court; when cases do proceed to court, victims often feel re-victimized by the system; and when cases do proceed to sentencing, sentences are often too lenient and not reflective of the gravity of the offence.

The Family Violence Court

The Manitoba Family Violence Court was implemented in September of 1990 as a direct response to the growing backlog of family violence cases. It was based on the recognition

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[6] See, for example: *The Winnipeg Sun*, May 13, 29; June 12, 1988; the *Winnipeg Free Press*, June 10; September 12; October 8, 1988; October 17, 1990; and *The Globe And Mail*, September 22, 1988.

that family violence cases require specialized prosecution. The court handles all family violence appearances, remands, guilty pleas, preliminary hearings and trials in Winnipeg that would typically be processed in Provincial Court. Where possible, trials in the Court of Queen's Bench in Winnipeg are prosecuted by Crown Attorneys of the Family Violence Unit. According to Ursel (1998b), the aim behind the creation of the Family Violence Court was to establish a unit staffed with specialized court personnel that could be sensitive to the dynamics of partner violence rather than treating them in a similar manner as assaults occurring outside of the family domain. Six Crown Attorneys and two support staff were assigned to the Family Violence Court Unit. One component of the Family Violence Court Unit is the Women's Advocacy Program, which consists of counsellors and lawyers who provide information and support for women whose partners have been charged with a domestic violence offence. The program also provides legal information and advocacy, emotional support and short-term counselling to women while their cases are being dealt with in court.

The Family Violence Court has three main objectives: to process cases efficiently; to increase victim/witness cooperation with Crown Attorneys so as to reduce case attrition rates, particularly at the prosecutorial level (through a reduction in stays of proceedings); and to provide more consistent and appropriate sentencing to strengthen the safety of the victim, to mandate treatment for batterers and to increase monitoring of offenders (through probation) (Ursel 1998b). Once a charge involving partner violence has been laid by police, Crown Attorneys are instructed to proceed to trial unless it becomes clear, at some point in

the proceedings, that there is no longer a *prima facie* case for which there is a reasonable likelihood of conviction (Manitoba 1999a). The policy states:

> (1) Every effort should be made to encourage witnesses who are victims of domestic violence to testify, including putting such witnesses on the stand, but where the charge is provable by other evidence, the reluctant spouse should be excused without further sanction.
>
> (2) Where there is not sufficient evidence without that of the victim regard must be had to the circumstances of each offence. The more serious the offence, the more appropriate it would be to take all reasonable steps to compel testimony. (Manitoba 1999a)

The Crown policy outlines three measures for proceeding to trial: 1. charges should proceed unless the evidentiary basis supporting the case collapses; 2. the evidence will be measured against the "reasonable expectation of conviction" standard; and 3. proceedings should not be terminated unless it is clear that there is no longer sufficient evidence to support charges (Manitoba 1999a).

While the Crown policy encourages vigorous prosecution of partner violence cases, in the event that a woman requests that charges against her partner be dropped, a referral is automatically made to the Women's Advocacy Program (Manitoba 1999b). In cases where a victim refuses to testify, she can no longer be subject to prosecution, unless the circumstances are extraordinary or unusual (Manitoba 1999b). Before the specialized court system, victims who refused to testify in court were sometimes declared hostile witnesses or charged with contempt of court (Ursel 1998b). In order to deal with these situations, Crown Attorneys have developed innovative strategies such as testimony bargaining (Ursel

1998b). Similar to the strategy of plea bargaining wherein the Crown Attorney negotiates with the accused or his lawyer, testimony bargaining involves Crown negotiations with a victim/witness who is reluctant to proceed to court. For instance, a victim/witness might indicate to the Crown that she does not want her partner to go to jail. In this case, the Crown will ask the victim/witness what outcome, ideally, she would like. If the victim/witness relates that she does not want her partner to go to jail, the Crown will agree to drop the most serious charge (i.e., the charge that could lead to a sentence of imprisonment) in exchange for her testimony in court. These procedures are intended to balance the Crown Attorney's dual mandate of vigorous prosecution and victim sensitivity. Ursel (1998b) notes that a high level of public support for the specialized court system soon followed the implementation of the Family Violence Court. For instance, the Winnipeg Area Study found that only one year after it began operation, 89 percent of the respondents supported the Manitoba Family Violence Court.

The Pedlar Report

Despite efforts to respond more effectively to partner violence, problems remained in the application of the charging directive. In particular, concerns were raised over the effectiveness and enforcement of restraining orders after two murder-suicides in Winnipeg, Manitoba. Each case involved a man who was estranged from his partner. One of these cases involved a man who frequently violated restraining orders but was never reprimanded (*Winnipeg Free Press*, 16 November 1990). As a result, Manitoba's then Minister of Justice,

James McCrae, announced in November of 1990 that the Province of Manitoba would appoint Winnipeg lawyer, Dorothy Pedlar, to conduct an extensive six-month review of the criminal justice system's response to domestic violence against women (Pedlar 1991). The review was to focus on eight major areas: enforcement of current laws; processing of charges; bail orders: restraining orders: training of individuals involved in the law enforcement system; firearms acquisition certificates; treatment of offenders; and access to legal assistance for victims (1991). The Domestic Violence Review acknowledged that there had been an inconsistent application of the charging directive:

> As a result of the consultations. it became evident that there was some confusion as to the scope of the charging directive issued in 1983. That directive specifically refers to spousal assault. It was generally agreed that 'common law' relationships were included in the definition of 'spousal', but there was a difference of opinion on the length of cohabitation necessary to establish a 'common law' relationship. The majority were of the opinion that the charging directive did not apply to dating relationships. Other areas of confusion included the type of offences to be considered.
>
> There is a need for clear and consistent terminology and guidelines to be established throughout the province for all the administration of justice. (Pedlar 1991: 15)

At the completion of the Domestic Violence Review, six key recommendations were made: the definition of spouse be extended to include any intimate partner, past or present; a dispatch protocol be developed to ensure that all calls are relayed to police for attendance; the message be communicated to both parties that the burden to lay charges lies with the police and not the victim: the victim's statement alone will be sufficient to constitute reasonable and probable grounds for the laying of a charge; transportation to a safe place be

provided for the victim; and the presence or absence of alcohol on the part of either of the parties is not a factor relevant to the laying of a charge (Pedlar 1991).

The Zero-Tolerance Policy

In 1992, responding to the recommendations of the Domestic Violence Review, the Law Enforcement Services Branch of Manitoba Justice and the Winnipeg Police Service developed a comprehensive protocol – which came to be known as "zero-tolerance" – for responding to cases of domestic violence. The zero-tolerance policy, which went into effect on July 12, 1993, reinforced the 1983 charging directive from the Manitoba Attorney-General. The police policy on partner abuse was intended to remove the responsibility from the victim (who might feel intimidated against pressing charges in the presence of her abusive partner) and to transfer the onus onto the police for the laying charges.[7] The policy made it clear that the victim's statement alone is sufficient to constitute reasonable grounds to lay charges. The policy reads:

> It is a police duty and responsibility to lay a charge when there are reasonable grounds to believe that a domestic assault or some other offence has occurred. Charges shall be laid whether or not the victim wishes to proceed with the matter, and even in circumstances where there are no visible injuries or independent witnesses. Once a charge(s) involving domestic violence has been laid, all decisions relating to prosecution/disposition are made at the sole

[7] The zero-tolerance policy defines domestic violence or partner abuse as "violence, threats of violence, or other acts of a criminal nature which may include elements of emotional and psychological abuse committed against a person by that person's spouse, common-law spouse, boyfriend, girlfriend or other intimate partner, past or present" (Winnipeg Police Department 1993: 6).

> discretion of the FAMILY VIOLENCE UNIT CROWN ATTORNEYS. (Winnipeg Police Department 1993: 6)

The Royal Canadian Mounted Police (RCMP), on the other hand, adopted a notably different version of the 1983 Manitoba Attorney-General's directive. Whereas the Winnipeg Police Service's charging policy instructs police officers to lay charges in the absence of corroborating evidence, the 1994 policy statement implemented by the RCMP provides that police officers charge only the *primary aggressor* in cases where both parties allege to have been assaulted.[8] Further, the RCMP policy advises that Crown opinion be obtained "before proceeding with charges against any victim who has retaliated or is alleged to have precipitated ('counter-accusations') against the abuser for the purposes of self protection" and "Due consideration will be given to the safety measures deemed necessary and taken by the alleged crimes and will not automatically result in additional charges which include the abused party" (Manitoba 1994).

Ursel (1998b) claims that the Winnipeg Police Service has Canada's strongest mandatory charging policy. For instance, she notes that Winnipeg police arrested over three thousand men for assaulting their spouses in 1995, whereas in Edmonton (a city of almost identical size) only 782 men were arrested for the same crime. In Toronto, a city with four times the population of Winnipeg, 5487 persons were arrested for spousal assault. According to Ursel and Brickey (1996), there is a high degree of public support for the new mandatory charging policy in Winnipeg. A survey conducted only one year after its implementation

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[8] Personal Communication between Elizabeth Comack and Ken Biener, former Inspector with the Winnipeg Police Service, November 1999.

found 85 percent support for the police directive.

Post Zero-Tolerance: The Schulman Report

As early as December of 1994, the Manitoba Coalition Opposed to Violence Against Women (COVAW) had charged the Provincial Government with failing to act on many of the recommendations made in the 1991 Domestic Violence Review (McGillivray & Comaskey 1996). Criticisms were further directed at the uneven application of the charging directive and the resulting gaps in policing, prosecution, enforcement of protection orders, granting bail and timely and appropriate intervention (McGillivray & Comaskey 1996). Many of these issues were raised at the inquiry into the deaths of Rhonda and Roy Lavoie. Rhonda and Roy Lavoie were married, but separated, when they were found dead in their van north of Gimli, Manitoba on January 20, 1995. Roy had murdered his wife, Rhonda, and then committed suicide. In the months preceding their deaths, both had been involved with one or more government departments or social service agencies that provide services to domestic violence victims and offenders (Schulman 1997). Despite repeated acts of severe physical and sexual violence against his wife, Roy Lavoie was released on bail. Even after violating a condition of his bail order to have no contact or communication with Rhonda, Roy was released on bail for a second time. It was during this time that he kidnapped and murdered his wife.

In October of 1995, then Manitoba Justice Minister Rosemary Vodrey announced a public inquiry into the deaths of Rhonda and Roy Lavoie. Mr. Justice Perry W. Schulman of the Manitoba Court of Queen's Bench was appointed to head the inquiry, which was to

examine how the Manitoba criminal justice system and social service agencies responded in this case, specifically, and the needs of victims of domestic violence, generally. In particular, the inquiry was to examine several aspects of the justice system including: the possibility of amendments to the Criminal Code to provide further protection to victims of domestic violence; the policies and role of police services and Crown Attorneys in dealing with cases of domestic violence; and the effectiveness of support systems available to victims of domestic violence (Schulman 1997).

The report, "A Study of Domestic Violence and the Justice System in Manitoba," was released by then Justice Minister Vic Toews on August 25, 1997. Justice Schulman offered a total of ninety-one recommendations directed at six groups and organizations: the police, the courts, the corrections system, social service agencies, the legal profession and governments. Among the recommendations directed at the police and courts were that a Vulnerable Persons Investigation Unit be established to deal with domestic violence; that the zero-tolerance policy direct police officers to charge only the primary aggressor in domestic violence incidents where both parties claim to have been assaulted by one another; that the police policy instruct police officers to consider charging an offender with obstruction of justice where there are grounds to believe that a breach of a restraining order has occurred; that Crown Attorneys develop strategies to allow domestic violence cases to proceed to trial in the absence of victim cooperation; that risk assessment reports be completed before an offender's bail application is heard; and that Crown Attorneys avoid instituting a stay of proceedings in cases involving criminal harassment or stalking (Schulman 1997).

Following the release of the report, the Lavoie Implementation Committee was formed to work with community groups toward implementing the recommendations. Within five months of the Lavoie Report, 30 recommendations relating to the provincial government had been addressed and implemented and, by November of 1998. all 73 recommendations relating to the province of Manitoba had been addressed (Manitoba 1998). Subsequently, the failure on the part of the Winnipeg Police to respond to repeated 911 calls from two Aboriginal women in February 2000 precipitated City Council's formation of the Domestic Violence Working Group to review the *Lavoie Report* and the City's progress on the implementation of recommendations.[9]

The Domestic Violence Working Group was established by City Council in February 2000 with Councillor Jenny Gerbasi as chair. The following six recommendations were made:

1. The Winnipeg Police Service provide ongoing, mandatory professional development programs on domestic violence for police officers. and for Emergency Response/911 Communication Centre Staff; and that training components include: the cycle of violence, speaking with survivors of domestic violence. the role of the Police in relation to Crown Prosecutors. judges and correctional staff. and intervention goals:

2. The Emergency Response/911 Communication Centre staff receive additional professional development with respect to dealing with conflicting and ambiguous information which they

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[9] Doreen Leclair and her sister Corrine McKeowen called the police five times from Leclair's Winnipeg home before they were both stabbed to death by McKeowen's former boyfriend (*Winnipeg Free Press*. 17 February 2000). McKeowen had a non-molestation order against her former boyfriend.

receive from callers in the course of their duties;

3. The Emergency Response/911 Communication Centre staff be included in de-briefing sessions with respect to crisis incidents;

4. The Winnipeg Police Service establish on a pilot project basis, a Domestic Violence Intervention Unit, which would include components of social work expertise, to develop intervention and support initiatives on high risk domestic violence cases;

5. The Winnipeg Police Service establish a process for ongoing monitoring of the Winnipeg Police Service response to domestic violence incidents. The monitoring would be conducted by an outside community-based agency with a background in Domestic Violence; and

6. The Winnipeg Police Service investigate the implementation of a 311 telephone number for non-emergency calls, to minimize the number of non-emergency calls to the 911 emergency number, as other municipalities in North America have done. (City of Winnipeg 2000)

The criminal justice response to domestic violence in Manitoba grew out of a political and social climate within which the state was pressured by feminists who called for the just treatment of wife abuse cases, social science research proclaiming the deterrent value of mandatory charge policies and public calls to "get tough" on crime. One of the key components of the state's response was the implementation by the Winnipeg Police Service of a zero-tolerance policy which mandated police officers to lay charges in cases of domestic assault where there are reasonable and probable grounds to believe an assault had taken place. Nevertheless, while some writers argue that Winnipeg's zero-tolerance policy has

fulfilled its mandate and represents a step forward for abused women, others argue that the consequences of the zero-tolerance policy have been damaging for women (and men).

II. ASSESSING THE IMPACT OF THE REFORMS

Ursel (1998a) provides quantitative and qualitative evidence which she argues is indicative of the success of the Manitoba government's response to partner violence. One measure of the effectiveness of the 1983 directive in Manitoba and the zero-tolerance policy in Winnipeg, she argues, is the number of arrests. Because the intent of both policies was to improve police response to partner violence calls by mandating police to lay charges, success would be indicated by an increased number of arrests. Her research reveals that the number of arrests did, in fact, increase dramatically from 1983 to 1992/93 (from 629 to 3025) – which she claims is evidence of the effect of substantial policy changes at the police level.

At the court level, Ursel (1998a) notes that one of the main purposes for the creation of the Manitoba Family Violence Court was to increase the amount of court time devoted to processing family violence cases. She points out that while the court began operation in 1990 with only 52 court room hours allocated per week, within its first year the amount of court time doubled because of the caseload. More recently, Ursel (1998a: 144) notes: "the majority of cases are processed in a month or two, because of the frequency of guilty pleas." The Family Violence Court has also been able to set trial dates more quickly than the regular court (Ursel 1998a).

Together with the increase in the number of domestic violence charges is an increase

in the number of people being sentenced, as well as a substantial change in the pattern of sentencing (Ursel 1995a). Ursel (1995a) notes that prior to the Family Violence Court, the most frequent disposition for domestic violence cases was a conditional discharge (28%), a suspended sentence (28%) and a fine (24%).[10] Incarceration was the least frequent disposition (11%). In the first two years of the Family Violence Court, probation became the most frequent disposition (75%), followed by incarceration (22%). For Ursel (1995a), this is evidence of a substantial shift on the part of the courts toward a view of family violence as a serious crime with serious consequences. Whether these changes represent an improvement for the lives of women and their children remains to be answered.

In order to assess the effects of these changes on the lives of women and their children, Ursel (1998a) argues that we must examine the qualitative changes in the justice system as a result of the policy directives. She points out that the first qualitative change that resulted from the implementation of the Family Violence Court was the change in the work culture within the specialized Crown Attorney unit. Before specialization, Crown Attorneys' definition of "success" was convictions. Accordingly, domestic violence cases were seen as low-profile and undesirable because they rarely resulted in convictions due to the reluctance of the victim to cooperate with the prosecution (Ursel 1998a). Ursel (1998a) found that before specialization, several Crown Attorneys admitted that they would often leave court after an unsuccessful conviction feeling more bitter towards the victim than the accused. In short, the victim was seen as the major obstacle to success. With specialization, Ursel

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[10] The pre-FVC data set consisted of taking a 53 percent sample of all spousal abuse cases handled in Winnipeg courts between 1983 and 1986 (Ursel 1995a).

(1998a) notes, "domestics" were redefined as high-priority cases requiring the most skilled individuals who could be sensitive to the dynamics of domestic violence cases.

Ursel (1998b) argues that while the dual mandate of vigorous prosecution and victim sensitivity might be contradictory to some, with specialization innovative strategies such as testimony bargaining have been introduced to eliminate this problem. In addition, she notes that in the first six years of the Family Violence Court's operation, no victims were declared hostile witnesses and no victims were held in contempt of court. If the victim does not wish to proceed in court, the warrant is canceled after two weeks. Ursel (1998a) also notes that the rise in the rate of stays of proceedings (from 22% in 1990/91 to 47% in 1993/94), which some might interpret as evidence of the policy's failure, is evidence of the sensitivity of the prosecution policy to the wishes of the victim.

On the other side of the debate are feminists who argue that the Winnipeg Police Service's zero-tolerance policy and the Manitoba Family Violence Court have minimally improved the lives of abused women and, in some respects, made conditions worse for these women. Snider (1995), for example, argues that there is no reason for Ursel (1995a) to conclude that arresting more suspects is beneficial to the women involved. In fact, according to Currie (1998), surveys of women who have successfully employed the criminal justice system have found that the most important source of satisfaction for many came from the validation of their experiences of violence, not from any positive outcomes that followed criminal justice intervention. Snider (1995) further points out that the men arrested under Winnipeg's zero-tolerance policy are not representative of all abusers. They are largely from

the working- or lower-class, have low-level jobs or are unemployed, are less than 40, have prior records and have little education. In other words, they are the abusers with the lowest resources and the least ability to resist criminal justice intervention. Snider (1995) makes a final point that there is no reason to believe that increased rates of incarceration are beneficial to abused women or men. She notes: "The one documented effect of imprisonment is to make those subject to it more resentful, more dangerous, more economically marginal, and more misogynous" (1995: 246).

While Snider (1995) focuses a large part of her criticism on the damaging effects of the Winnipeg Police Service's zero-tolerance policy on marginalized men, the impact of the police policy on abused women has generated a great deal of concern among the public and in the media. At the police level, three key concerns raised by women's advocates, victims/survivors and the public following the implementation of the zero-tolerance policy can be identified: selective enforcement; increased charges against women; and a backlash. By re-victimizing women who have already been victimized, it is feared that all three problems will have the overall effect of deterring women from turning to the criminal justice system to respond to situations of domestic violence.

The problem of selective enforcement on the part of the police has been the subject of public concern. On May 26, 1997, the *Winnipeg Free Press* reported a case involving a constable who had been charged with two separate attacks on his wife. After the police officers spoke with the victim, it was discovered that her husband had attacked her on three separate occasions. On all of the occasions, the woman contacted the police for assistance

and no charges were laid. In response to this case, the Manitoba Minister of Justice instructed senior Manitoba Justice officials to make clear to Crown Attorneys and Winnipeg Police officers that the city's zero-tolerance policy on partner abuse remains in effect, and is to be enforced indiscriminately (*Winnipeg Free Press*, 27 May 1997).

The increase in the number of women charged with domestic violence following the implementation of the Winnipeg Police Service's zero-tolerance policy has prompted a great deal of concern among women's groups and victims/survivors of partner violence. For instance, it was reported in the *Winnipeg Free Press* (20 December 1993) that the zero-tolerance policy had resulted in a 400 percent increase in the rate of women being charged with domestic assaults (compared to a 100 percent increase in the rate of men charged). Research from the Family Violence Court and the Winnipeg Police Service also indicated that within three months (July to September) in 1993, 190 adult women were arrested in Winnipeg for domestic violence - an increase from 156 for all of 1992 (*Winnipeg Free Press*, 20 December 1993). This research also indicated that 856 adult men were arrested for domestic violence in Winnipeg during a three-month period - an increase from 595 for all of 1992 (*Winnipeg Free Press*, 20 December 1993). The increase in the number of women charged with domestic violence is thought to be the result of the zero-tolerance policy's lower standard for reasonable and probable grounds. Thus, when police officers are confronted with a situation where both partners claim they have been assaulted, under the zero-tolerance policy officers have tended to charge both parties with an offence.

In 1994, the New Democratic Party (NDP) Caucus formed the NDP Task Force on

Violence Against Women to gain a better understanding from the people of Manitoba as to how the provincial government could effectively address the issue of violence against women. The Task Force (1995) found particular concerns among people they spoke with that offending spouses are able to have their victims charged as well, whether reasonable and probable grounds for such a charge exist or not. Marguerite Meekis, a resident of Winnipeg, comments:

> When I was assaulted by my ex-partner, he told the police I had assaulted him and they arrested him and they arrested me and laid a charge. They didn't even ask me whether it was true, let alone check for bruising on him and on me. (cited in NDP Caucus Task Force 1995: 3)

Similarly, in McGillivray and Comaskey's (1999: 106) study, four women spoke of being charged alongside their abusive partners:

> I was charged under the zero-tolerance policy. My ex-husband counter-charged me...[Charges] were dropped because I had a witness that was there at the time and denied I ever hit him.
>
> I was very fortunate. There was a witness to verify that I had not hit my husband like he claimed. I think about the situation as being unfair because how many other women are being charged under the no-drop policy that have no witness to verify that they had not [hit him] and as a result they are being charged?
>
> You both get charged even if you're defending yourself, apparently. It's not fair if you're defending yourself.
>
> I'm kind of scared to phone them any more. I'm scared to get thrown in jail again.

In 1993, it was reported in the *Winnipeg Free Press* (20 December 1993) that a

woman had been charged for trying to stop her ex-boyfriend from assaulting her. She explains:

> My ex-boyfriend decided to beat me up so I phoned the police ... I had bruises. He threw me across the room. He smacked me. The babysitter is a witness.

Her offence occurred soon after this incident.

> He was going towards the baby's room and I grabbed him and slapped him.

The NDP Task Force (1995) and women's groups worry that the zero-tolerance policy could cause women to stop reporting abuse for fear that they will be charged alongside their partners.[11] Waultraud Grieger, president of the Manitoba Association of Women's Shelters and head of Nova House, a women's shelter in Selkirk, comments:

> The next time the man actually hits her, she's not going to call for help. She's going to think 'I don't want to be charged' ... The whole idea of zero tolerance wasn't to haul everyone into court. (*Winnipeg Free Press*, 20 December 1993)

Women's groups maintain that many of these women were only trying to defend themselves against abusive partners (*Winnipeg Free Press*, 20 December 1993).

Responding to these concerns, Inspector Ken Biener of the Winnipeg Police Service (who drafted the zero-tolerance policy) pointed out that the lower standard for reasonable and probable grounds likely has something to do with the increase in the number of women being

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[11] This concern was also raised by Mr. Justice Perry Schulman in his 1997 report, "Commission Of Inquiry Into The Deaths Of Rhonda and Roy Lavoie: A Study of Domestic Violence and the Justice System in Manitoba."

charged with domestic assault (*Winnipeg Free Press*, 1994). He did concede, however, that at least some of the arrests of women could be the result of vindictive complaints by men who are themselves facing charges for domestic violence. Sharon Perrault, family violence team-leader at Ma Mawi Wi Chi Itata, comments:

> My concern is the whole idea of this policy was to help keep women safe and these numbers seem to suggest a lot of them are just getting locked up. (*Winnipeg Free Press*, 1994)

The third consequence of the zero-tolerance policy has been the backlash from men in the form of counter-claims of abuse by their female partners. Pervading all of these claims is the image of the 'vindictive' and 'dangerous' woman who knows how to manipulate men and the system. For example, in 1993, a case was reported in the *Winnipeg Free Press* (20 December 1993) of a man who was detained by the police because his ex-girlfriend allegedly made false accusations that he had violated his restraining order. The man had already been charged with aggravated assault and uttering threats against his ex-girlfriend on three separate occasions. He comments:

> I know women are the ones being beaten up most times. There's no denying it. But in my case, it's vice versa. This woman knows how to work the system. (*Winnipeg Free Press*, 20 December 1993)

Roger Woloshyn, president of a men's advocacy group called Men's Equalization, claims that Winnipeg's zero-tolerance policy is too susceptible to abuse and that women can have men arrested and thrown in jail on the basis of one telephone call to police (*Winnipeg Free Press*, 23 January 1998). Implicit within men's counter-claims of battering at the hands of

their female partners is the suggestion that women are as violent as men and, consequently, in need of control.

From a review of the literature and media reports regarding Winnipeg's zero-tolerance policy, two key issues have emerged: the effect of the Winnipeg Police Service's zero-tolerance policy on the criminal justice response to partner violence; and the growing concern among the public that women are becoming increasingly violent. Following Faubert and Hinch (1996), further research needs to be directed at empirically examining the unintended consequences (both positive and negative) of mandatory charging policies, especially in light of the increase in the number of women being charged with domestic violence under Winnipeg's zero-tolerance policy. At the same time, media attention surrounding the growing number of women being charged with domestic violence has, in part, led to the view that women are becoming as violent, if not more so, than men. Social science research (particularly family violence research) has played a key role in supporting the view that women are men's equals in violence. One of the most commonly used measures in family violence surveys is the Conflict Tactics Scale (CTS).

The Conflict Tactics Scale

Developed by Murray Straus (1979) and his colleagues to measure techniques for resolving family conflicts, the CTS consists of eighteen items ranging in severity from "verbal reasoning" (for example, discussing the issue calmly with the other person) to "verbal aggression" (for example, insults, threats) and "physical aggression" (for example, throwing

something at the other person, using a weapon, hitting). Respondents are asked how frequently they perpetrated each act during the past year, ranging from "never" to "more than 20 times," and estimates of rates of violence are constructed from these self-reports. Based on the results of the Conflict Tactics Scale, researchers have tended to conclude that a *sexual symmetry* exists in partner violence; that is, women are men's equals in violence (see, for example: Sommer, Barnes & Murray 1992; Straus 1979). For example, Stets (1990) found that within the family, women inflict more verbal and severe physical aggression than men. In a similar vein, Brinkerhoff and Lupri (1989) found that wife-to-husband violence prevailed over husband-to-wife violence, whether one measures partner violence by means of the overall violence scale or by the severe violence scale. In her book, *When She Was Bad: Women and the Myth of Innocence*, Patricia Pearson (1997) uses research based on the Conflict Tactics Scale to argue that women are as likely as men to initiate acts of violence. She argues that the dynamic of domestic violence is not analogous to two differently weighted boxers in a ring; that there are relational strategies and psychological issues at work which counteract the fact of physical strength.

While researchers have continued to use the Conflict Tactics Scale to suggest that violence in intimate relationships is a "two-way" street, many writers have found evidence to suggest otherwise. For example, Browning and Dutton (1986) found that 87 percent of the women in their study tended to view their relationship with their partners as husband-violent, whereas 53 percent of the men tended to view their relationship with their partners as either mutually violent or wife-violent. Many writers have also taken issue with the reliability of

the scale, arguing that by counting all acts equally, the Conflict Tactics Scale fails to consider the context of the violent act and the meaning, motive and outcome (i.e. injury) of the violence (see, for example: Browning & Dutton 1986; DeKeseredy & Kelly 1992; DeKeseredy & MacLean 1998; Dobash & Dobash 1992; Ferraro & Johnson 1983; Schwartz & DeKeseredy 1993). Johnson (1996) argues that the CTS ignores the gender power imbalances that exist within marriage and society and, instead, assumes a level playing ground exists in families and society wherein men and women share equal power and resources. To this extent, the CTS ignores the social roles of women and men within marriage which causes them to attribute different meanings to similar acts and to suffer different consequences of acts which appear similar when examined without context (Johnson 1996).

Many writers have pointed out that the equivalent rates of women's and men's intimate violence based on the CTS might be the result of a discrepancy in reporting among men and women or a minimization of certain acts of violence on the part of husbands. For instance, Johnson (1996) notes that in clinical studies of counselling groups using the CTS to measure violent behaviour, women reported more violence by their husbands than their husbands reported themselves, and men often ignored the fact that their actions caused severe injury to their wives. In a similar vein, Browning and Dutton (1986) found that wives rated significantly more violence for their husbands than the husbands acknowledged for themselves. According to Johnson (1996), many therapists who work with abusive men have found that denial seems to be a typical response when confronted about their abusive

behaviour. Difficulty in recalling abusive incidents against their female partners or minimizing the seriousness of their actions may also contribute to the discrepancy in reporting rates among men and women.

In sum, while Conflict Tactics Scale research has examined the extent of partner violence in terms of the quantitative differences between men's and women's intimate violence, it has failed to consider the qualitative nature of their violence. In order to answer the question of whether the partner violence that comes to the attention of the police and courts is symmetrical, research needs to be directed at exploring the extent to which women's intimate violence is qualitatively different from men's in terms of the forms of the violence and the social contexts in which it occurs. From this, we will gain a better understanding of what the partner violence that comes to the attention of the criminal justice system looks like.

CONCLUDING REMARKS

Over the past two decades, wife abuse has been transformed from a private trouble to a public issue meriting criminal justice response. In the process, however, competing interpretations have emerged over the effect of the criminal justice response to wife abuse. One policy in particular which has received considerable attention has been the Winnipeg Police Service's zero-tolerance policy toward domestic violence.

On the one hand, writers such as Ursel (1998a) claim that the increase in the number of charges following the implementation of Winnipeg's zero-tolerance policy is evidence of

its effectiveness; police are now treating violence in the home as a serious matter deserving criminal justice intervention. In a similar vein, Conflict Tactics Scale researchers would interpret the increase in the number of women charged under the policy as evidence that the criminal justice system is working more fairly; women (who are seen as men's equals in violence) are now being charged alongside men for their violent behaviour.

On the other hand, critics such as Snider (1995) would argue that the zero-tolerance policy has resulted in a "net widening" effect whereby more individuals are now being brought into the criminal justice system on charges of domestic violence. Similar to Smart's (1989) analysis, the recourse to law has had a juridogenic effect by making the situation which the policy was intended to resolve worse. By lowering the standard for reasonable and probable grounds, the zero-tolerance policy has resulted in more men – and women – being charged with a criminal offence. With this lowered threshold, violence in the home is now being treated *more* harshly than violence in the street, thus creating added problems for abused women (particularly those marginalized by their race/ethnic and class position).

In light of these competing interpretations, the purpose of the present study is to examine the effect of the Winnipeg Police Service's zero-tolerance policy on the criminal justice response to partner violence. The next chapter discusses the existing research on the Manitoba criminal justice system's response to partner violence, poses questions that emerge from this research and outlines the materials and methods to be used to investigate these questions.

Chapter Two

Researching the Criminal Justice Response To Partner Violence

One of the main sources of information on the criminal justice response to domestic violence in Manitoba has been the Family Violence Tracking Project. The project was initiated by Jane Ursel in September of 1990 (on the opening day of the Family Violence Court). As discussed in Chapter One, the Family Violence Court had three main objectives: to process cases efficiently; to increase victim/witness cooperation with Crown attorneys so as to reduce case attrition rates, particularly at the prosecutorial level (through a reduction in stays of proceedings); and to provide more consistent and appropriate sentencing to strengthen the safety of the victim, to mandate treatment for batterers and to increase monitoring of offenders (through probation) (Ursel 1998b). The Family Violence Tracking Project was set up to evaluate whether the Family Violence Court was realizing these goals. The aim of the project was to track all cases processed in the Family Violence Court and to selectively monitor wife abuse cases and child abuse cases (Ursel 1992a). While the tracking process involved coding case characteristics, court processing and sentencing from the files of the accused after disposition, the monitoring process involved court observation to record not only the relevant case characteristics but also the court procedure (Ursel 1992a).

In the first section of this chapter, the findings from the Family Violence Tracking Project will be presented. These findings will be used to inform the three main questions on which the present study is based. The second section of the chapter will outline the materials

and methods to be used to investigate these questions.

I. THE FAMILY VIOLENCE TRACKING PROJECT

Before and One Year After the FVC

The first phase of the Family Violence Tracking project involved an evaluation of the processing and sentencing of cases in the first year of the Family Violence Court's operation. The operation of the FVC was compared with the processing and sentencing of cases in the General Court prior to specialization. The pre-FVC data set consisted of taking a five-year average (1983 to 1987) from data collected on domestic assault cases. According to Ursel (1992a), three significant findings emerged from the data. First, following the implementation of the Family Violence Court, there was a 30 percent increase in the number of family violence cases coming to court, with the majority (80%) of these cases being wife abuse cases. Second, there was a reduction of 15 percentage points in stay rates, from 37 percent prior to specialization to 22 percent in the Family Violence Court (see: Table 2.1). According to Ursel (1992a), the reduction in the stay rate has had a significant impact on the percentage of cases proceeding to sentencing, specifically, 51 percent prior to specialization versus 64 percent in the Family Violence Court. Finally, there was a significant change in sentencing in the specialized court. In particular, Ursel (1992a) notes that the largest increase over pre-FVC was the rate of dispositions of probation and incarceration. Before specialization, the most frequent sentences were: first, a conditional discharge; second, a suspended sentence; and third, probation. Incarceration, she notes, was rarely an outcome in

domestic violence cases, with only 6 percent of the cases receiving these sentences. According to Ursel (1992a), the Family Violence Court is imposing much more rigorous sentences. Specifically, of the cases proceeding to sentencing in the Family Violence Court, the most frequent disposition was probation (78%), followed by a suspended sentence (30%) and incarceration (25%).

Table 2.1: Before and One Year After the FVC

	Before FVC	**FVC**
Stay of Proceedings	37%	22%
Attrition	**49%**	**36%**
Proceed to Sentence	**51%**	**64%**
Conditional Discharge	–	10%
Suspended Sentence	–	30%
Probation	–	78%
Incarceration	5.8%	25%

– No percentages provided.

Source: Ursel, E. J. 1992a. *Family Violence Court: Research Project Summary Final Report.* (May) Department of Sociology, University of Manitoba.

Comparative Perspective: Before FVC versus FVC versus General Court

The second report produced from the Family Violence Tracking Project involved a comparative analysis of the processing and sentencing of 1,625 family violence cases disposed over a period of four years prior to the introduction of the specialized court, 1,600 family violence cases disposed in the first year of the operation of the Family Violence Court, and 500 non-domestic crimes against persons disposed of in the General Court over a period of one year. According to Ursel (1992b), four significant findings emerged from the data.

First, Ursel (1992b) hypothesized that data prior to specialization should exhibit the highest stay rate and highest attrition rate of the three courts. While the data did not reveal the expected difference in stay rates between the pre-FVC data set and the General Court data set, Ursel (1992b) notes that it did reveal a higher overall attrition rate before specialization due to a higher rate of cases dismissed for want of prosecution (DFWOP) and cases found not guilty. Overall, the case attrition in the pre-FVC data set is somewhat higher (47%) than in the General Court data set (43%) (see: Table 2.2).

Second, Ursel (1992b) hypothesized that the Family Violence Court should have equivalent or less attrition of cases than the General Court. The data, she argues, confirm this hypothesis. Specifically, Ursel (1992b) notes that the Family Violence Court has a significantly lower stay rate (22%) than the General Court (32%) and the pre-FVC data set (31%). It also has a slightly lower DFWOP and not guilty rate than the pre-FVC data set (12% versus 16%). The consequence of this is that the FVC has a significantly higher proportion of cases proceeding to sentencing (64%) than the pre-FVC data (53%) and the General Court data (57%).

Third, Ursel (1992b) hypothesized that cases prior to specialization should have the most lenient sentences and the highest rate of conditional discharges of the three courts. The pre-FVC data did, in fact, reveal the highest rate of conditional discharge of the three courts (specifically, 8 percentage points higher than the FVC and 5 percentage points higher than the General Court) and the lowest rate of incarceration (specifically, 10 percentage points lower than the FVC and 13 percentage points lower than the General Court) and probation (specifically, 38 percentage points lower than FVC and 16 percentage points lower than the

General Court). According to Ursel (1992b), this is evidence that criticisms of sentencing practices of wife abuse cases in the past were accurate.

Fourth, Ursel (1992b) hypothesized that while the Family Violence Court and the General Court should be equivalent in severity of sentencing, differences should emerge in terms of the types of sentences. In particular, the FVC should put a greater emphasis upon long-term monitoring (through probation) and court-mandated treatment than the sentencing in the General Court or in the court prior to specialization. What the data revealed is that individuals are almost twice as likely to receive a sentence of probation in the Family Violence Court than in the General Court (49% versus 27%). However, incarceration rates are similar in the Family Violence Court and the General Court (16% versus 19%). Further, Ursel (1992b) argues that the Family Violence Court also stands out as the court which imposes the most labour-intensive conditions from the standpoint of corrections (i.e. a higher proportion of supervised probation and court-mandated treatment dispositions).

Table 2.2: Before FVC versus FVC versus General Court

	Before FVC	**FVC**	**General Court**
Stay of Proceedings	31%	22%	32%
Attrition	**47%**	**36%**	**43%**
Proceed to Sentence	**53%**	**64%**	**57%**
Conditional Discharge	14%	6%	9%
Suspended Sentence	14%	19%	9%
Probation	11%	49%	27%
Incarceration	6%	16%	19%

Source: Ursel, Jane. 1992b. *A Comparative Study Of Sentencing In The Specialized And General Criminal Courts In Winnipeg* (September) Winnipeg: Criminology Research Centre, Department of Sociology, University of Manitoba.

Year One and Year Two of the FVC

The second phase of the tracking project involved a comparison of the processing and sentencing of cases in the first and second year of the Family Violence Court's operation. The report found two important differences. First, the data revealed an increase in the stay rates from 22 percent in the first year of the Family Violence Court's operation to 31 percent in the second year. The result was a decrease in the percentage of cases proceeding to sentencing in the second year (57%) as compared to the first year (64%) (see: Table 2.3). Ursel (1995b) explains the differences between the two years as the result of a significant change in police charging practices that began in the fall of 1991. The dramatic increase (58%) in spousal abuse charges not only increased the caseload, it also resulted in a significant increase in the stay rate: as police discretion was dramatically reduced, discretion at prosecutorial level increased. The result was an increase in stays of proceedings in the second year of the Family Violence Court.

The second finding revealed by the data was a decrease in the percentage of all cases with dispositions of incarceration (from 16 percent in the first year to 11 percent in the second year of the Family Violence Court) and a decrease in the percentage of all cases resulting in a probationary sentence (from 49 percent in the first year to 42 percent in the second year). Ursel (1995b) suggests that this decline might possibly be the result of the 9 percent increase in the stay rate: that is, fewer people are receiving a sentence of probation or incarceration because proportionally fewer people are proceeding to sentence. She claims that the best measure of changes in sentencing patterns is to examine the percentages in each sentencing category based on the number of cases proceeding to sentence. The data revealed

that in first year of the FVC, 78 percent of all persons sentenced received probation, while in the second year 74 percent of those sentenced received probation. The decline in incarceration is similarly small with 25 percent of all persons sentenced in the first year receiving incarceration, while 20 percent were incarcerated in the second year. Ursel (1995b) insists that we must question whether the higher stay rate is an indication of a serious loss of rigor or momentum in the FVC or whether it is an indication of an evolving division of labour between police and Crown attorneys.

Table 2.3: Year One and Year Two of the FVC

	Year One (1990-91)	Year Two (1991-92)
Stay of Proceedings	22%	31%
Attrition	**36%**	**43%**
Proceed to Sentence	**64%**	**57%**
Conditional Discharge	10%	14%
Suspended Sentence	30%	29%
Probation	78%	74%
Incarceration	25%	20%

Source: Ursel. E. Jane. 1995b. *Winnipeg Family Violence Court Evaluation.* Department of Sociology, University of Manitoba.

Four and Seven Years of the FVC

Data from the first four years of the Family Violence Court revealed two notable changes (see: Table 2.4). First, the stay rate increased from 22 percent in 1990/91 to 31 percent in 1991/92 to 41 percent in 1992/93 and, finally, to 47 percent in 1993/94. Second, whereas prior to the FVC, the most frequent sentence was a conditional discharge (28%), a suspended sentence (28%) and a fine (24%), in the four years after specialization, probation became the

most frequent sentence (74%), followed by incarceration (29%).

Table 2.4: Four Years of the FVC

	Before FVC	FVC (4 Years)
Conditional Discharge	28%	15%
Suspended Sentence	28%	–
Fine	24%	17%
Probation	–	74%
Incarceration	–	29%

– No percentages available.

Source: Ursel, Jane. 1996. *Submission to the Commission of Inquiry Into the Deaths of Rhonda Lavoie and Roy Lavoie.* (April 17).

Data from the first seven years of the Family Violence Court revealed two important findings. First, there has been a significant increase in the stay rates from 22 percent in the first year of the court's operation to 47 percent in 1997. Ursel (2000) explains that in the first four years of the FVC, there was a significant increase in the number of spousal assault charges entering the courts (from 1,444 to 3,743). As police widened the net of cases entering the system, not all cases had sufficient evidence to proceed. Further, with the implementation of the zero-tolerance policy in 1993, police discretion was dramatically reduced and transferred to the Crown attorneys. For Ursel (2000), the most significant factor contributing to rising stay rates has been the change in Crown culture: high stay rates are indicative of a prosecution policy that is sensitive to the victim's needs. The second finding highlighted by Ursel (2000) is the consistent sentencing pattern in the Family Violence Court over the last seven years. According to Ursel (2000), the message that is being communicated from the

courts is that domestic violence is a serious crime with serious consequences. Alongside this, Ursel (2000) notes, is a strong commitment to rehabilitation with the most frequent disposition being supervised probation and court-mandated treatment.

Emerging Research Questions

Three broad questions emerge from this review of the findings from the Family Violence Tracking Project:

1. *Are there differences between partner and non-partner violence cases in terms of their processing by the criminal justice system?*

According to Ursel's second study (1992b), comparative analysis of case attrition and sentencing patterns in the General Court and Family Violence Court provided evidence that family violence is being seen as a serious crime meriting serious consequences. Subsequent to this report, however, the stay rates in the Family Violence Court more than doubled: from 22 percent in 1990/91 to 47 percent in 1997. This finding raises questions about whether the criminal justice system is, in fact, treating partner violence as seriously as non-partner violence.

2. *Are there differences in the processing and sentencing of partner violence cases before and after the implementation of the zero-tolerance policy?*

Data from the Family Violence Tracking Project reveal that both the number of charges and the number of stays of proceedings increased dramatically over the first seven years of the court's operation. This raises questions about the impact of the zero-tolerance policy on

the processing and sentencing of partner violence cases. For instance, are there qualitative differences in the partner violence cases being processed by the court after zero-tolerance that would explain the high stay rates?

3. *Are there differences in the processing and sentencing of women and men charged with partner violence?*

As discussed in Chapter One, the zero-tolerance policy has resulted in not only more men – but more women – being charged with partner violence. To date, however, reports from the Family Violence Tracking Project have not included an analysis of gender, especially in terms of whether policies like zero-tolerance are having a differential impact on the processing and sentencing of women and men. As well, this analysis is important in light of Conflict Tactics Scale research that has consistently claimed women as "men's equals in violence."

These three questions provide the framework for the present study. More specifically, the investigation will be broken down into three stages. Stage One will focus on the processing of cases of violence involving partners versus those involving non-partners. Stage Two will concentrate on the processing and sentencing of partner violence cases before and after the implementation of the zero-tolerance policy. Stage Three will examine the processing and sentencing of women and men who have been charged with partner violence offences. The following section elaborates on the data set and methods of analysis to be employed.

II. MATERIALS AND METHODS

The Data Set

The data for the present study have been drawn from City of Winnipeg Police Incident Reports on cases of women and men charged with criminal acts of violence (i.e. murder, attempted murder, assault, other assaults, sexual assault, other sexual offences, abduction and robbery) over a five year period (1991 to 1995).[1] A random sample of adult women (stratified by offence type) generated 501 cases or 15 percent of those charged. A sample of adult men (stratified by offence type) charged over the same period was drawn for comparative purposes, yielding 501 cases or 2.5 percent of those charged. Of the 1002 cases in this initial sample, 528 (53%) involved violence between partners or ex-partners (i.e. husbands and wives, boyfriends and girlfriends, common law partners and lesbian/gay partners): 243 women and 285 men. The remaining 474 cases (47% of the sample) involved non-partner violence: 159 (16%) involved violence between strangers: 207 (21%) involved violence between friends or acquaintances: 89 (9%) involved violence between family members: and 19 (1%) involved violence against police officers.

Data were collected on the characteristics of the accused (sex, race/ethnicity, age, marital status, employment status, education level, number of dependents, criminal history); the social context or setting of the event (location, time of day, presence of drugs and/or

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[1] The rationale for selecting the period of 1991 to 1995 issues from the introduction of the Winnipeg Police Service's zero-tolerance policy towards domestic violence on July 12, 1993. Accordingly, collecting data during the period of 1991 to 1995 allows us to examine the impact of policy changes at the police level on the definition and processing of cases of domestic violence.

alcohol); the interactions among the participants (number and sex of victims, relationship of the accused to the complainant, number and sex of co-accused, number of witnesses or bystanders); the nature of the violence used by the accused, complainant and co-accused (the form of violence, the presence and type of weapons); and, finally, the outcome or aftermath of the event (who contacted the police, the type of charges laid, whether the complainant was charged, whether the accused was co-operative with the police, whether the accused admitted responsibility for the offence, the degree of harm or injury received, the plea and nature of the disposition.

In order to address the three broad questions posed in the previous section, the data were organized into three groups or stages of analysis. Stage One involved a sub-sample of 470 cases of men (285 partners and 185 non-partners) who were charged with violent offences. Stage Two involved a sub-sample of 339 cases of partners (male and female) charged prior to the implementation of the zero-tolerance policy and 338 cases of partners charged after zero-tolerance came into effect.[2] Stage Three utilized a sub-sample of those cases involving women accused of partner violence (243) and those involving men accused of partner violence (285).

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[2] Because only 190 (36%) of the 528 charges involving partner violence were laid prior to the implementation of the zero-tolerance policy in 1993, an additional random sample (stratified by offence type) of 149 partners charged with violent offences prior to July of 1993 (when the policy came into effect) was collected.

Measurement of Variables

a. Social Relationship

Social relationship refers to the relationship between the accused and the primary victim. The social relationship variable was coded into five broad social relationships: partners or ex-partners, family members, friends or acquaintances, strangers and police. This variable will serve as the selection variable for Stage One of the analysis (which examines differences between partners and non-partners). Because one of the aims of the Family Violence Court was to be sensitive to cases of family violence rather than treating them in the same manner as assaults occurring outside of the family domain and because we are only interested in violence between intimate partners, cases from the non-partner sample involving violence between family members (n=89) were excluded for the purposes of this first stage. Further, because of the small sample size, cases involving the police (n=19) were also excluded from the analysis. The categories consisting of friend or acquaintances and strangers were then recoded into a single category referred to as "non-partners."

b. Year of Charge

Year of charge refers to the year that the charge was laid against the accused by the police. Year of charge ranges from 1991 to 1995. As the zero-tolerance policy was implemented on July 12, 1993, those charges laid prior to this date were recoded into a broad category "pre zero-tolerance" and those charges laid subsequent to this date were recoded into the category "post zero-tolerance." This variable will serve as the selection variable for Stage Two of the analysis (which examines differences between partner violence cases before and after the

zero-tolerance policy).

c. Sex of Accused

Sex of accused refers to the sex of the person against whom charges were laid. This variable will serve as the selection variable for Stage Three of the analysis (which examines differences between men and women charged with partner violence).

d. Legal Variables

Five legal variables are included in the study:

Accused Previous Contact. Previous contact refers to whether the accused has had previous contact (violent and/or non-violent) with the police as an accused. It should be noted that previous contact does not necessarily refer to prior convictions. As such, previous contact is a legally relevant variable not at the sentencing stage but at the Crown attorney level in terms of the decision to stay the proceedings. This variable was coded as a dichotomous (yes/no) variable.

Accused Nature of Charges. Nature of charges refers to the type of criminal charge laid against the accused by the police. As an accused typically enters the criminal justice sytem with more than one charge, nature of charges is measured by identifying the most serious of all charges laid against the accused. A severity of charge scale was constructed and consisted of five categories of offences: non-violent, level 1 or other assaults are considered the least serious offences, followed by level 2 and 3 assaults, sexual offences, robbery and attempt murder, manslaughter or murder, which are considered the most serious offences (see:

Appendix A). For the purposes of the multivariate analysis, however, level 2 and 3 assaults, sexual offences, robbery and attempt murder, manslaughter or murder were combined into one category referred to as "more serious offences." This served as the reference category in comparison to non-violent, level 1 or other assaults referred to as "less serious offences."

Accused Number of Charges. Number of charges refers to the number of charges (violent and/or non-violent) laid by the police against the accused for a given incident of violence. Number of charges may range from one to five or more offences.[3]

Victim Charged. Victim charged refers to whether or not the victim was charged with a criminal offence alongside the accused. This was coded as a dichotomous (yes/no) variable.

Victim Nature of Charges. This variable refers to the type of criminal charge laid against the victim by the police. In the same manner as "accused nature of charges." where a victim was charged with more than one offence, the most serious charge was selected. The severity of charge scale was used to make this determination.

e. Event Variables

Eleven criminal event variables are included in the analysis:

Accused Degree of Violence. Degree of violence used refers to the degree of violence used by the accused against the victim during the course of the event. A degree of violence scale was constructed consisting of minor, moderate and major violence (see: Appendix B). Minor

[3] For the purpose of the multivariate analysis, the category "more than five charges" was included in the 5-charge category to meet the requirement of interval level variables in logistic regression.

violence includes tactics such as pushing, shoving, grabbing, elbowing, shaking, wrestling, scratching, pinching, poking or slapping. Moderate violence includes tactics such as hitting with something, throwing an object, biting, punching (once) or burning. Major violence includes tactics such as slamming body or head into something, kicking or kneeing, choking or strangling, beating, shooting or stabbing.

Accused Use Weapon. Accused use weapon refers to whether or not the accused used a weapon during the course of the event.[4] This was coded as a dichotomous (yes/no) variable.

Accused Nature of Weapon. Nature of weapon refers to the type of weapon used by the accused. Weapons may include items such as blunt objects, sharp objects, beer or wine bottles, firearms and other weapons. A category was also included for multiple types of weapons.

Accused Injured. Accused injured refers to whether the accused received physical injuries during the course of the event. This was coded as a dichotomous (yes/no) variable.

Accused Degree of Injury. Accused degree of injury refers to the degree of injury received by the accused. A degree of injury scale was constructed and consisted of minor, moderate and major injuries (see: Appendix C). Minor injuries includes items such as cuts, broken skin, scratches, bite marks, bruises, swelling, welts or redness. Moderate injuries include items such as broken bones, fractures or burns. Major injuries include items such as gunshot wounds, stab wounds, head injuries, loss of consciousness, internal bleeding/organ damage

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[4] The presence of weapons was determined by the researcher rather than according to the police officer's definition of a weapon. For example, there were instances where objects were used during the course of the event, which did not come to be defined as a weapon by the police officer but were coded by the researcher as a weapon.

or death.

Victim Use Violence. Victim use violence refers to whether or not the victim used violence against the accused during the course of the criminal event. This was coded as a dichotomous (yes/no) variable.

Victim Degree of Violence. Victim degree of violence refers to the degree of violence used by the victim against the accused during the course of the criminal event. The severity of violence scale was used to determine minor, moderate and major violence (see: Appendix B).

Victim Injured. Victim injured refers to whether the victim received physical injuries during the course of the event.[5] This was coded as a dichotomous (yes/no) variable.

Victim Degree of Injury. Victim degree of injury refers to the degree of injury received by the victim. The severity of injury scale was used to determine minor, moderate and major injuries (see: Appendix C).

Social Location. Social location refers to the social context or setting in which the violence took place. Social location consists of seven categories: private dwelling (includes hotel room); on the street (includes back lane, alley, parking lot, garage or secluded area); drinking establishment (includes bar, lounge or pub); other commercial establishment (includes store, gas station, diner or shopping mall); in a vehicle (includes private vehicle, public transportation, taxi, train or bus); school property, park or playground; and other (includes

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[5] As police officers are primarily concerned with the establishment of physical evidence, whether or not the victim experienced emotional trauma as a result of the incident could not be accurately recorded. It is not unreasonable to assume, however, that any domestic violence incident has the potential to be emotionally unsettling, at the very least.

workplace, employment office, court, institution or leisure centre).

Who Contacted Police. This variable identifies the person who initially contacted the police for assistance with the violent event. The variable consists of six categories: complainant/victim; accused; co-accused; witness or bystander; police happened by/acting on information; and both accused and victim.

f. Social Variables

Eight social variables were included in the analysis:

Race. Race refers to the racial background of the accused and consists of three categories: Aboriginal, Caucasian and Other.[6]

Employment Status. Employment status refers to whether the accused was employed or unemployed and/or on social assistance. Students were considered employed. Information about the level or type of employment of the accused was not included in the police incident reports.

Sex of Accused. Sex of accused refers to the sex of the person against whom charges were laid. This variable is included as a predictor variable in the regression model for only Stage Two of the analysis.

Sex of Victim. This variable identifies the sex of the victim of the violent event.

Number of Victims. Number of victims refers to the total number of victims involved in the violent event. The number of victims may range from one to more than five.

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[6]. Although race is a very crude measure of the ethnicity of the accused, police incident reports either do not record the ethnic status of the accused or do so inconsistently.

Presence of Co-accused. Presence of co-accused refers to whether any co-accused were involved in the criminal event. A co-accused includes any person who acted with the accused during the course of the event and was charged alongside the accused with a criminal offence. This was coded as a dichotomous (yes/no) variable.

Number of Co-accused. This variable refers to the number of co-accused present during the violent event. The number of co-accused may range from one to more than five.

Sex of Co-accused. This variable refers to the sex of *all* the co-accused involved in the violent event. Sex of co-accused consists of three categories: co-accused male; co-accused female; co-accused male and co-accused female.

g. Case Attrition

One of the dependent variables in the present study is case attrition. This variable will be used in both the descriptive and multivariate analyses. Case attrition is the term used to describe all cases that enter the criminal justice system that do not proceed to the sentencing stage. Case attrition includes acquittals, stays of proceedings, dismissals, discharges and dismissed for want of prosecution. As binary logistic regression requires a dichotomous dependent variable, the case attrition variable (attrition/not attrition) was employed with "not attrition" being the reference category. This variable was created by combining all those dispositions that resulted in attrition as a '1' (attrition) and all those dispositions that proceeded to sentence as a '0' (not attrition).

h. Disposition

Disposition is the second dependent variable and will be used in the descriptive analysis alone. Disposition includes all those cases that proceeded to the sentencing stage. Since an accused who is charged with more than one offence may receive multiple dispositions, the most serious of all dispositions laid against the accused was identified. A severity of disposition scale was constructed and consisted of three categories: 1. absolute or conditional discharge, fine, community service work (CSW) or restitution; 2. suspended sentence plus probation; and 3. incarceration (provincial or federal). The category including dispositions such as absolute or conditional discharges, fines, community service work or restitution is considered to be the least serious, while the category including provincial or federal incarceration is considered the most serious disposition (see: Appendix D).

Methods of Data Analysis

The data analysis for the first two of the three stages of the study was conducted in two parts. The first involved a descriptive analysis in which a chi-square test of significance was used for testing bivariate relationships. The data analysis for the third stage of the study involved only a descriptive analysis in which a chi-square test of significance was used. The second part involved a more advanced multivariate technique. Binary logistic regression is the most appropriate technique for predicting a dichotomous dependent variable from a set of independent variables (Brownridge & Halli 2000). Unlike other multivariate techniques, logistic regression has no assumptions about the distributions of the predictor variables; in logistic regression, the predictors do not have to be normally distributed, linearly related or

of equal variance within each group (Tabachnick & Fidell 2000). Further, in logistic regression, the predictors can be any combination of continuous, discrete and dichotomous variables. The interpretation of the logistic regression method is simple as well. For a given variable, it provides a ratio of the odds of the occurrence of the dependent variable (Brownridge & Halli 2001). An odds ratio of greater than one suggests a positive effect of the covariate on the occurrence of the dependent variable. An odds ratio of less than one suggests a negative effect of the covariate on the occurrence of the dependent variable.

CONCLUDING REMARKS

The present study offers a number of methodological advantages over existing research. Stage One of the study will allow for a comparison between partner and non-partner violence in terms of the nature and severity of violence used during the event, as well as the injuries received. It can also examine whether there are differences in terms of the nature and severity of the criminal justice response between partner and non-partner violence cases. While the Family Violence Tracking Project examines the processing and sentencing of all family violence cases entering the Family Violence Court (in comparison to the General Court and prior to the implementation of the specialized court), it cannot examine the more qualitative differences that might exist between partner and non-partner violence cases. The present study's broader focus will allow for such comparison. This analysis will be particularly important given that the Manitoba Family Violence Court and the Winnipeg Police Service's zero-tolerance policy were implemented to correct the historic inequity of treating "violence in the home" as a private matter not meriting criminal justice intervention.

While the Family Violence Tracking Project is able to assess changes over time in terms of the number of cases entering the Family Violence Court and the resulting outcomes, it has not examined the issue of whether there has been a qualitative shift in the nature of the partner violence cases where charges were laid before and after the zero-tolerance policy. A further area of interest is in the processing and sentencing of partner violence cases before and after the implementation of the police protocol. Indeed, the Family Violence Tracking Project has shown an increase in stays of proceedings over time. What the Tracking Project does not explain, however, is what impact this has had on both the men and women accused. In Stage Two of the study, whether there have been any significant changes before and after the zero-tolerance policy will be examined in terms of: the nature and severity of the violence tactics used in the event and the resulting injuries; the social characteristics of the accused (specifically, whether charges are more likely to be laid against individuals marginalized by their race/ethnic or class position); and the nature and severity of outcomes and dispositions (specifically, the incidence of case attrition). This analysis will be particularly important given the claims by some writers that the zero-tolerance policy has resulted in a "net widening," whereby partners (particularly those marginalized by their race/ethnic and class position) are now more likely to be charged with a criminal offence.

A final benefit of the present study is its attention to gender, specifically, the women who are charged with domestic violence offences. This analysis is crucial given the growing belief that women are men's equals in violence and that the increase in the number of women being charged with criminal offences under the zero-tolerance policy is evidence that the criminal justice system is working more fairly now. This view is one which has long been

supported by Conflict Tactics Scale researchers who claim equivalent rates of women's and men's violence. One of the benefits of the present study is that Police Incident Reports are employed as the main source of data.[7] While we know that men constitute the vast majority of accused processed through the courts, we do not have a good understanding of the consequences for the women who have been charged under the zero-tolerance policy. In Stage Three of the study, partner violence cases involving women and men accused will be used to determine whether there are qualitative differences in men's and women's violence in terms of the violence tactics used by both the accused and complainant, the injuries incurred by both the accused and complainant and who is seeking assistance from the police. These data will also be used to determine whether there are qualitative differences in terms of the charges laid against men and women accused (and their complainants) and the resulting outcomes and dispositions of their cases.

The next three chapters lay out the findings for each of these three stages of the analysis.

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[7] Although family violence research has, for the most part, relied on the Conflict Tactics Scale, Police Incident Reports serve as a potentially more reliable source of data on women's and men's violence for a number of reasons. First, while Conflict Tactics Scale research relies upon respondents' self-reports of their perpetration of and victimization by violence, Police Incident Reports are constructed from a number of sources (i.e. accounts by victims, accused and witnesses or bystanders, as well as police observations). Second, while Conflict Tactics Scale research asks respondents to recall events over a twelve-month period, Police Incident Reports document acts of violence on a case-by-case basis, thereby increasing their reliability. Finally, because Police Incident Reports are constructed with a view to establishing whether evidence of a criminal act is present in a particular case, they contain detailed information regarding not only the violence tactics used (by both the accused and the complainant) but also the resulting harm or injury incurred – a variable which has been absent in Conflict Tactics Scale research.

Chapter Three

Partner Versus Non-Partner Violence

One of the first reports (Ursel 1992b) released as part of the Family Violence Tracking Project involved a comparative analysis of the processing and sentencing of cases involving violent crime charges based on three different data sets: 1,600 family violence cases processed during the first year of the Family Violence Court's operation; a non-random sample of 1,625 family violence cases (53% of the total) processed in the General Court prior to the implementation of the Family Violence Court; and a sample of 510 non-family violence cases processed by the Provincial Judges Court during 1991. Ursel's (1992b) analysis of these data revealed the Family Violence Court to have a significantly lower stay rate (22%) than the General Court (32%) and the pre-FVC data set (31%). It also had a slightly lower DFWOP and not guilty rate than the pre-FVC data set (12% versus 16%). Consequently, the FVC had a significantly higher rate of cases proceeding to sentencing (64%) than the pre-FVC data set (53%) and the General Court data set (57%). The data also revealed that while incarceration rates were similar for the FVC and the General Court (16% versus 19%), individuals were almost twice as likely to receive a sentence of probation in the Family Violence Court than in General Court (49% versus 27%).

On the basis of these findings, Ursel (1992b) concluded that family violence was being treated by the criminal justice system as a serious crime meriting serious consequences. Yet, in a subsequent report, Ursel (1992b) notes that the stay rate in the Family Violence Court increased from 22 percent in 1990/91 to 47 percent by 1997. This finding raises

questions about whether the criminal justice system is, in fact, treating partner violence (between husbands and wives, common law partners, boyfriends/girlfriends and gay and lesbian partners) as seriously as violence between non-partners (friends/acquaintances and strangers).

To address this issue, a sample of 470 men charged by the Winnipeg Police Service with criminal acts of violence over a five-year period (1991 and 1995) was utilized; 285 (61%) of the men were charged with violence against their partners and 185 (39%) were charged with violence against non-partners. Partner violence cases had a significantly higher incidence of case attrition than non-partner violence cases (53% versus 39%). Consequently, a higher number of non-partner violence cases proceeded to the sentencing stage (61% versus 47%) (see: Table 3.1).

Table 3.1: Case Attrition by Social Relationship

Outcome **	**Partners+**	**Non-Partners ±**
Attrition	53% (149)	39.3% (72)
Proceed to Sentence	47% (132)	60.7% (111)
Total	100% (281)	100% (183)

* $p < .05$; ** $p < .01$; *** $p < .001$

\+ There are 4 missing cases.
± There are 2 missing cases.

At first glance, then, it would appear that partner violence cases are being processed differently by the criminal justice system than non-partner violence cases. In order to pursue this issue further, two different analyses were undertaken. First, a descriptive analysis was conducted to determine whether there are qualitative differences between partner and non-

partner violence cases that would account for the disparity in attrition. Second, a multivariate analysis involving a series of logistic regressions was performed to determine the extent to which the differences in case attrition levels can be explained by legal, event and social variables.

I. QUALITATIVE DIFFERENCES BETWEEN PARTNER AND NON-PARTNER VIOLENCE

Descriptive Analysis

Ten measures were used to examine whether there are qualitative differences between partner and non-partner violence cases: the number and sex of the victims; the social relationship between the victim and the accused; the social location of the event; the number and sex of co-accused; the nature of the violence tactics used by accused; whether weapons were used by the accused; and the extent and nature of injuries received by victims. Because Comack, Chopyk and Wood (2000) found qualitative differences in the nature of the violent event based on the social relationship of the accused to the victim, the non-partner category was separated into friends or acquaintances and strangers where it was appropriate. Doing so produced some interesting findings.

Our first and second measure of qualitative differences between partner and non-partner violence cases is the number and sex of the victims. Eighty-nine percent of partner violence cases involved only one victim, whereas only 76 percent of non-partner violence cases involved a single victim. This suggests that partner violence cases are more likely to be one-on-one, while non-partner violence is more likely to be directed at a number of victims. Females comprise 93 percent of the victims in partner violence cases but only 34

percent of the victims in non-partner violence cases. Males, on the other hand, comprise 7 percent of the victims in partner violence cases and the remaining 66 percent of the victims in non-partner violence cases. Thus, the social relationship between the victim and the accused in partner violence cases is primarily *inter-gendered* (male/female), while the social relationship in non-partner violence cases is primarily *intra-gendered* (male/male).

There were a total of 319 victims of men accused in partner violence cases and 248 victims of men accused in non-partner violence cases. Twenty-five percent of the victims were (ex)girlfriends of the accused, 4 percent were friends or acquaintances of the accused, 6 percent were family members of the accused and 1 percent were police officers. While same-sex partners were included in the definition of 'partner,' only one case in the sample involved a gay couple. The majority (64%) of victims were (ex) married or common-laws of the accused. Of all the victims of men in non-partner violence cases, 48 percent were friends or acquaintances of the accused and 52 percent were strangers to the accused.[1] The finding that almost half of the victims in non-partner cases were either friends or acquaintances of the accused calls into question the image of violence outside of the domestic realm as being perpetrated by "dark strangers" skulking about the streets (Comack, Chopyk & Wood 2000). Further, when we separate non-partner violence cases by the social relationship of the victim to the accused, we find the gender dynamic to be more continuous rather than dichotomous. More specifically, as we move from partner violence to non-partner violence involving friends or acquaintances to non-partner violence involving strangers, we

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1. The category "friend/acquaintance" includes friends or acquaintances, employers or employees and roommates or tenants. The category "stranger" includes strangers, security guards, bar or store employees and undercover police officers.

see a gradual decrease in the number of female victims and a subsequent increase in the number of male victims (see: Table 3.2).

Table 3.2: Sex of Victim by Social Relationship

Sex of Victim	Partner	Friend/Acquaintance	Stranger
Female	93% (297)	40% (51)	28% (34)
Male	7% (22)	60% (75)	72% (88)
Total	100% (319)	100% (126)	100% (122)

The fourth measure of qualitative differences between partner and non-partner violence is the social location of the criminal event. Table 3.3 presents the results of social location crosstabulated by social relationship. Not surprisingly, the vast majority (93%) of partner violence cases took place in private dwellings. What is perhaps most interesting is that 41 percent of non-partner violence cases also took place in private dwellings, while only 21 percent of non-partner violence cases took place on the street. This finding again calls into question the notion that non-partner violence primarily occurs outside on the streets.

Indeed, when we separate the non-partner category into friends or acquaintances and strangers we find that similar to partner violence cases, the majority (72%) of events involving friends or acquaintances took place in private dwellings. Thirty-six percent of events involving strangers took place on the streets. From these findings, we observe that as we move from partner violence cases to non-partner violence cases involving friends or acquaintances to cases involving strangers, we see a gradual shift from private to public in the social location of the event.

Table 3.3: Social Location by Social Relationship

Social Location***	Partner	Non-partner
Private dwelling[a]	93.3% (266)	40.5% (75)
On the street[b]	1.8% (5)	20.5% (38)
Drinking establishment[c]	1.8% (5)	12.4% (23)
Commercial establishment[d]	1.8% (5)	18.9% (35)
Vehicle[e]	0.4% (1)	3.8% (7)
School property/park/playground	0.4% (1)	1.6% (3)
Other[f]	0.7% (2)	2.2% (4)

* $p < .05$; ** $p < .01$: *** $p < .001$

a. Includes dwelling of accused, dwelling of victim, mutual dwelling of victim and accused, dwelling of other and hotel room.
b. Includes street, back lane or alley, parking lot or garage and secluded area.
c. Includes bar, lounge and pub.
d. Includes store, gas station, diner and shopping mall.
e. Includes private vehicle, public transport, train, bus and taxi.
f. Includes workplace, court, institution, employment office and leisure centre.

The fifth and sixth measures of qualitative differences is the number and sex of co-accused. While only one partner violence case involved a co-accused, 40 percent of the non-partner violence cases involved co-accused. Of the non-partner violence cases involving co-accused, the majority (61%) involved more than one. Further, the co-accused in the partner violence case was a woman, whereas the majority (86%) of the co-accused in non-partner violence cases were male. The findings indicate that men accused in partner violence cases act alone, while men accused in non-partner violence cases engage in group-based activity with other men. If we separate non-partner violence cases into friends or acquaintances and strangers, we find that the involvement of co-accused to be more continuous, as was the case with the sex of the victim and social location of the event. Specifically, while co-accused were present in 32 percent of non-partner violence cases involving friends or acquaintances, co-accused were present in 48 percent of cases involving strangers.

The seventh measure of qualitative differences between partner and non-partner violence is the nature of the violence tactics used by the accused. Table 3.4 provides the incidence of each type of violence used by the men accused crosstabulated with the social relationship variable. The data reveal that men accused in partner violence cases are most likely to push, shove, grab, elbow, pull, shake or wrestle (52%); punch faces and/or bodies (25%); and slap face and/or bodies (24%). Men in non-partner violence cases, on the other hand, are most likely to damage or steal property (35%), push, shove, grab, elbow, pull, shake or wrestle (35%); and utter threats or threaten with a weapon (28%). These findings suggest that partners are using much more serious violence tactics than non-partners. This is consistent with the findings from the severity of violence scale, which show 61 percent of partners use major violence versus 52 percent of non-partners. When we separate the non-partner category, we observe that it is friends or acquaintances who are using more serious violence tactics than strangers (60% versus 40%). Indeed, whereas friends or acquaintances are most likely to push, pull, shove, grab, elbow, shake or wrestle (36%) and beat repeatedly (33%), strangers are most likely to damage, destroy or steal property (44%) and push, pull, shove, grab, elbow, shake or wrestle (33%).

Table 3.4: Type of Violence Used by Accused by Social Relationship

Type of Violence Used by Accused	Partners		Non-partners	
Utter threats/threaten with weapon	63	22.1%	51	27.6%
Property damage/theft ***	52	18.2%	65	35.1%
Push/shove/grab/elbow/ Pull/shake/wrestle ***	147	51.6%	64	34.6%
Bite/Pinch/scratch/poke eye	14	4.9%	7	3.8%
Pull/cut hair ***	47	16.5%	9	4.9%
Sit on/restrain otherwise	43	15.1%	29	15.7%
Slap (face and/or body) ***	67	23.5%	12	6.5%
Hit with/threw something	49	17.2%	40	21.6%
Burn/Spray	4	1.4%	1	0.5%
Kick/knee	57	20%	40	21.6%
Punch (face and/or body) *	72	25.3%	30	16.2%
Beat (repeat punching)	62	21.8%	50	27.0%
Sexual acts ***	10	3.5%	31	16.8%
Strangle/choke **	39	13.7%	10	5.4%
Slam or push body or head into something ***	76	26.7%	24	13.0%
Stab/Slash	6	2.1%	6	3.2%
Shoot	1	0.4%	0	0
Other violence[2]	10	3.5%	7	3.8%
No. of violence tactics	819		476	
No. of accused who used violence	285 (2.9 per person)		185 (2.6 per person)	

* $p < .05$; ** $p < .01$; *** $p < .001$

The eighth measure of qualitative differences is the use of weapons. Men accused in non-partner violence cases are more likely than men accused in partner violence cases to use

[2] The "other violence" category for partners includes tactics such as head-but, force to remove clothing/urinate on victim, force to remove clothing, shove fingers down victim's throat and twist arm. The "other" category for non-partners includes head-but, expose oneself/twist arm, remove clothing/pass virus, remove clothing/rub semen on victim, remove clothing/tattoo victim's body, shave victim's pubic hair and twist wrist.

weapons (41% versus 28%). There are no significant differences, however, in the types of weapons used. Table 3.5 provides the incidence of each type of weapon used by the accused crosstabulated with social relationship. It is interesting to note that blunt objects are the weapons of choice for both partners and non-partners, followed by sharp objects. If we separate the non-partner category into friends or acquaintances and strangers, we observe that accused in friend/acquaintance violence cases are less likely to use weapons than accused in stranger violence cases (36% versus 47%).

Table 3.5: Type of Weapon Used by Accused by Social Relationship

Type of Weapon**	**Partners**	**Non-partners**
Blunt object	35.1% (28)	35.5% (27)
Sharp object	25.0% (20)	27.6% (21)
Beer or wine bottle	16.3% (13)	11.8% (9)
Firearm	2.5% (2)	7.9% (6)
Other weapons[3]	11.3% (9)	5.2% (4)
Multiple types of weapons	10.0% (8)	11.8% (9)
Total no. of accused using weapons	100% (80)	100% (76)

* $p < .05$; ** $p < .01$; *** $p < .001$

The ninth and tenth measure of qualitative differences is injuries. Table 3.6 provides the incidence of each type of injury crosstabulated with social relationship. While men accused in partner violence cases are more likely to use more serious forms of violence, their victims are as likely as men's victims in non-partner violence cases to receive injuries (78%

3. The "other weapons" category for partners includes weapons such as chain, rope, pepper spray, cigarette, clothing, shoe, bag filled with toiletries, picture frame, pillow, chocolate bar, bed and unknown object. The "other weapons" category for non-partners includes weapons such as chain, rope, pepper spray, cigarette, truck and umbrella.

versus 81%). Men's victims in non-partner violence cases, however, are more likely to receive serious injuries. This might have something to do with the earlier findings that men in non-partner violence cases are more likely to use weapons and to sexually assault their complainants. Specifically, while men's victims in partner violence cases are more likely than men's victims in non-partner violence cases to receive sprains or sore body parts (37% versus 26%), men's victims in non-partner violence cases are more likely to receive or suffer cuts, broken skin, scratches or bite marks (48% versus 33%), lacerations or slashes (17% versus 6%) and sexual violation (22% versus 6%). The more severe injuries received by men's victims in non-partner violence cases is confirmed by the severity of injuries scale, which found 25 percent of non-partner victims to have received major injuries compared to 10 percent of partner victims. Men's victims in non-partner violence cases are also far more likely than men's victims in partner violence cases to require medical attention for their injuries (40% versus 16%). When we separate non-partner cases by friends or acquaintances and strangers, we find that similar to the degree of violence used, it is victims of friends or acquaintances who are more likely than strangers to receive injuries (91% versus 70%), especially serious injuries (33% versus 14%).

Table 3.6: Type of Injury Received by Victim by Social Relationship

Type of Injury Received by Victim	Partners		Non-partners	
Bloody or broken nose	21	9.4%	11	7.4%
Cuts/broken skin/scratches/bite marks **	73	32.7%	71	47.7%
Bruises/swelling/welts/ Redness	145	65%	90	60.4%
Loss of hair	2	0.9%	5	3.4%
Eye damage/black eye	27	12.1%	20	13.4%
Sprains/sore body parts *	83	37.2%	38	25.5%
Spray-related burns	0	0	1	0.7%
Broken bones/fractures **	3	1.3%	11	7.4%
Lacerations/slashes **	14	6.3%	25	16.8%
Imbedded glass/other object	0	0	1	0.7%
Other burns	2	0.9%	0	0
Chipped/lost teeth **	2	0.9%	9	6.0%
Sexually violated ***	13	5.8%	33	22.1%
Stab wounds	2	0.9%	5	3.4%
Gunshot wounds	0	0	1	0.7%
Concussion/head injury ***	0	0	10	6.7%
Internal bleeding/organ or artery damage *	4	1.8%	8	5.4%
Loss of limb/body part	0	0	2	1.3%
Loss of consciousness **	5	2.2%	14	9.4%
Coma	0	0	0	0
Brain damage	0	0	0	0
Paralysis	0	0	0	0
Death	0	0	2	1.3%
Other injury[4]	1	0.4%	1	0.6%

* $p < .05$; ** $p < .01$; *** $p < .001$

No. of injuries received	397	358
No. of victims who received injuries	223 (1.8 per person)	149 (2.4 per person)

[4] The "other injury" for the partner violence case was loss of hearing; for the non-partner violence case, the "other injury" was what the police defined as "post-incident trauma."

Based on the descriptive analysis, two observations can be made. First, it appears that partner violence *is* qualitatively different than non-partner violence. Whereas partner violence is primarily inter-gendered (male/female), one-on-one and occurring within the private sphere, non-partner violence is intra-gendered (male/male), group-based and occurring in public. In terms of the seriousness of the event, while partners are more likely to use serious violence tactics, non-partners are more likely to use weapons (although there are no differences in terms of the nature of weapons used). If we look at the resulting injuries from the violence, we observe that victims of partners are as likely as victims of non-partners to be injured. Victims of non-partners, however, are more likely than victims of partners to receive serious injuries.

The second observation is that while partner and non-partner violence cases are qualitatively different, these differences are more continuous rather than dichotomous. When we separate non-partner violence cases into friends or acquaintances and strangers, we find that as we move from partners to friends or acquaintances to strangers there is a gradual shift from violence that is inter-gendered, one-on-one and occurring in private to violence that is intra-gendered, group-based and occurring in public. Similarly, non-partner violence between friends or acquaintances appears to be more serious than non-partner violence between strangers in terms of the severity of violence used by the accused, the frequency of injuries received by the victim and the severity of injuries.Perhaps the main reason why stranger violence events appear to be less serious than events between friends or acquaintances is the motive behind many of these incidents: 37 percent of the charges laid by the police in cases

of stranger violence were for robbery. Indeed, the most frequent violence tactic used in stranger violence cases was "damage, destroy or steal property." This suggests that accused in cases of stranger violence are intent on stealing or damaging property more so than they are on inflicing injury or harm on their victims.

Given the qualitative differences between events involving partners, friends or acquaintances and strangers, then we might expect the processing of these cases to also differ. As we move from partners to friends or acquaintances to strangers, however, we observe a gradual *decrease* in case attrition. Specifically, 53 percent of partner violence cases, 45 percent of non-partner violence cases involving friends or acquaintances and 34 percent of cases involving strangers result in attrition.

II. DIFFERENCES IN THE CJS TREATMENT OF PARTNER AND NON-PARTNER VIOLENCE CASES

Multivariate Analysis

That partner violence cases are qualitatively different from non-partner violence cases begs the question of what it is about each of these groups that makes them unique with respect to the processing by the criminal justice system? More specifically, to what extent are differences in the cases attrition levels between partners and non-partners explained by legal, event and social variables? To address this question, a multivariate analysis involving a series of logistic regressions was performed.[5]

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5. A correlation matrix was performed to test for multicollinearity. Multicollinearity is the term used to describe when two variables are highly correlated (0.8 and higher). None of the correlation coefficients were greater that 0.8.

Table 3.7 provides the results of the logistic regression on case attrition for legal, event and social variables. The first model contains the results for the social relationship variable (partner/non-partner) without any controls.

Table 3.7: Results of Logistic Regression on Incidence of Case Attrition for Legal, Event and Social Variables

	Social Relationship	Legal Variables	Event Variables	Social Variables	Full Model
	n = 464	n = 464	n = 464	n = 462	n = 462
Covariates	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**
Social Relationship					
Partner	1.740 **	2.303***	1.706**	1.752**	2.312***
Non-partner	1.000	1.000	1.000	1.000	1.000
Constant	.649	1.967	.565	.808	1.453
-2 Log Likelihood	633.836	603.711	632.846	626.855	607.49

*p < 0.05; ** p <.01; *** p < .001

Consistent with the descriptive analysis, the odds are different in both groups. The results in Table 3.7 show that partners have 74 percent higher odds of case attrition than the reference category of non-partners. Is this finding due to legal factors, factors relating to the nature of the violent event or factors relating to the social characteristics of the accused?

The second model in Table 3.7 controls for legal variables. It appears that legal variables (such as previous contact with the police, the nature of the charges laid and the number of charges laid) make the difference in case attrition between partners and non-partners greater. Controlling for legal variables increases the odds of case attrition for partners compared to

non-partners by 56 percent. Legal variables, then, play an important role in the greater odds of case attrition for partners.

Event variables (degree of violence. weapons used, injuries received and degree of injury) are controlled for in the third model in Table 3.7. The results show that controlling for event variables, the odds of case attrition for partners compared to non-partners remain virtually the same. Event variables appear to have no effect on the greater odds of case attrition for partners.

The third model in Table 3.7 controls for social factors (race and employment status). The results show that by controlling for social factors, the odds of case attrition for partners compared to non-partners remain virtually unchanged.Social variables, like event variables, appear to have no effect on the greater odds of case attrition for partners.

When legal, social and event variables are entered into the full model in Table 3.7, the odds of case attrition for partners relative to non-partners remain virtually unchanged as when legal variables alone are controlled. This appears to reinforce the finding that it is primarily legal variables that make the difference in case attrition between partners and non-partners greater.

While the logistic regressions performed above provide insight into the impact of legal, event and social variables on social relationship differences in case attrition, they cannot tell us which variables are important for both partners and non-partners and they do not allow for a comparison of partners and non-partners. To give us an idea of the impact of legal, event and social variables for each group on case attrition, separate logistic regressions were performed for partners and non-partners.

Legal Variables, Social Relationship and Case Attrition

Recall from the logistic regression in Table 3.7 that it is the block of legal variables that was found to make the difference in case attrition between partners and non-partners greater. This regression analysis does not, however, tell us how individual legal variables operate for each social relationship group. Table 3.8 contains the results from these regressions. First, whether the accused had previous contact with the police has virtually no impact on case attrition for partners. For non-partners, on the other hand, having previous contact with the police decreases the odds of case attrition by 16 percent. Second, the number of charges laid against the accused has an impact on case attrition for both partners and non-partners. Specifically, for every additional charge laid against a partner, there is a 34 percent decrease in the odds of case attrition. For every additional charge laid against a non-partner, there is a 26 percent decrease in the odds of case attrition. Finally, the variable which has the greatest impact, by far, on case attrition for both partners and non-partners is the nature of charges laid against the accused. Contrary to what we would expect, however, it is the less serious charges (i.e. non-violent, level 1 assaults and other assaults) in comparison to the more serious charges (i.e. level 2 and 3 assaults, sexual offences, robbery, attempt murder, manslaughter and murder) that decrease the odds of case attrition. In particular, being charged with less serious offences decreases the likelihood of case attrition for partners by 51 percent and non-partners by 75 percent. This finding is especially surprising given that one would expect the more serious charges to be ones that would decrease the likelihood of case attrition and hence

increase the likelihood of proceeding to sentencing.[6] Non-partner cases involving less serious offences, however, are still less likely to result in case attrition than partner cases involving the same. This is consistent with the descriptive analysis that found partner violence cases to have higher levels of case attrition than non-partner violence cases.

Table 3.8: Results of Logistic Regression on Incidence of Case Attrition for Legal Variables by Social Relationship

	Partners	**Non-partners**
Covariates	**Odds Ratio**	**Odds Ratio**
Block 1 (Legal Variables)	**n = 281**	**n = 183**
	-2 Log Likelihood = 372.544	**-2 Log Likelihood = 228.202**
Previous Contact With Police		
Yes	.996	0.835
No	1.000	1.000
Accused Charges		
Less serious	.486	0.252
More serious	1.000	1.000
Accused Number of Charges	.663	0.738
Constant	3.961	2.095

Recall from the descriptive analysis that as we move from partner violence to violence between friends or acquaintances to violence involving strangers, the level of attrition decreases. This raises the question of what it is about each of these groups that makes them unique with respect to the processing by the criminal justice system. As it was the block of legal variables that were found to amplify the social relationship differences in case attrition.

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[6] One possible explanation for cases involving partners is that accused in more serious cases are more likely to be denied bail and held in detention. It is at this point that victims face the most pressure from their partners to drop the charges, therefore, resulting in a stay of proceedings.

the question that remains to be answered is: to what extent are differences in the case attrition levels between friends or acquaintances and strangers explained by individual legal variables? To address this question, a multivariate analysis involving a series of logistic regressions was performed. Table 3.9 provides the results from these logistic regressions.

Table 3.9: Results of Logistic Regression on Incidence of Case Attrition for Legal Variables by Non-partner Relationship

	Friends/Acquaintances	**Strangers**
Covariates	**Odds Ratio**	**Odds Ratio**
Block 1 (Legal Variables)	**n = 94**	**n = 89**
	-2 Log Likelihood = 110.600	**-2 Log Likelihood = 109.839**
Previous Contact With Police		
Yes	1.377	0.604
No	1.000	1.000
Accused Charges		
Less serious	.104	0.476
More serious	1.000	1.000
Accused Number of Charges	.613	0.831
Constant	0.033	1.411

Recall from Table 3.8 that previous contact had an impact on case attrition only for non-partners, with previous contact decreasing the odds of case attrition by 16 percent. Interestingly, an examination of Table 3.9 shows that this impact can be accounted for by stranger violence. Specifically, while having previous contact reduces the odds of attrition for strangers by 40 percent, having previous contact, in fact, *increases* the odds of attrition for friends or acquaintances by 38 percent. As well, recall from Table 3.8 that the number of charges had an impact on case attrition for both partners and non-partners. Every

additional charge laid against a non-partner decreased the odds of case attrition by 26 percent. An examination of Table 3.9 shows that this impact can be accounted for by friends or acquaintances. In particular, every additional charge laid against a friend or acquaintance reduces the odds of attrition by 39 percent. However, the odds of attrition are only reduced by 17 percent for strangers. Finally, Table 3.8 indicated that the severity of charges laid against the accused had an impact for both partners and non-partners, with less serious offences decreasing the odds of attrition for partners by 51 percent and non-partners by 75 percent. An examination of Table 3.9 shows that while the impact for strangers and friends or acquaintances is in the same direction and appears to be significant for strangers, it is much greater for friends or acquaintances. Specifically, the odds of case attrition are reduced by 90 percent for friends or acquaintances charged with less serious offences, whereas the odds of case attrition for strangers are reduced by 52 percent.

The findings of the logistic regression are difficult to interpret; many are not in the direction that one might expect. This suggests that there are likely other factors at work which might explain the differences in case attrition between partners and non-partners. Nevertheless, what these findings do tell us is that the *social relationship* between the accused and complainant(s) – not just between partners and non-partners, but also within the non-partner group between friends or acquaintances and strangers – is a key factor in the criminal justice processing of cases.

CONCLUDING REMARKS

Citing the finding that the Family Violence Court had a significantly lower attrition rate

(36%) than the General Court (43%), Ursel (1992b) has concluded that family violence is being treated by the criminal justice system as a serious crime meriting serious consequences. The findings of this study, however, suggest that partner violence cases are being processed differently by the criminal justice system than non-partner violence cases. Specifically, partner violence cases were more likely to result in attrition than non-partner violence cases. In an effort to determine why this was the case, we examined the specific features of these events.

The findings from the descriptive analysis suggest that partner violence is qualitatively different from non-partner violence, with the social dynamics being more continuous than dichotomous. More specifically, as we move from partner violence to violence involving friends or acquaintances to violence involving strangers, we see a gradual shift from violence that is inter-gendered (male/female), one-on-one and occurring in private to violence that is intra-gendered (male/male), group-based and occurring in public. More significant, the violence tactics used in events involving partners and friends or acquaintances were more severe than those involving strangers, and complainants in cases involving friends or acquaintances were most likely to incur injuries as a result. Nevertheless, the case attrition levels differed between these three groups: 53 percent of partner violence cases resulted in attrition compared with 45 percent of non-partner violence cases involving friends or acquaintances and 34 percent of those involving strangers.

Consistent with the descriptive analysis, the findings from the logistic regression indicated that partners had 74 percent higher odds of case attrition than the reference category of non-partners. When other variables were controlled, legal variables were found to play an

important role in the greater odds of case attrition for partners. The legal variable that seemed to operate most differently among the groups was the seriousness of offence variable. Surprisingly, the less serious charges in comparison to the more serious charges decreased the odds of case attrition, although non-partner cases involving less serious offences were still less likely to result in case attrition than partner cases involving less serious offences.

The high level of attrition for partner violence cases – when combined with the qualitative differences between events involving partners, friends or acquaintances and strangers – does suggest that the criminal justice system is responding differently to cases depending upon the social relationship between the accused and the complainant(s). We know that the zero-tolerance policy has resulted in more partner violence cases entering the system. One way of investigating this issue further, then, is to examine partner violence cases which were processed by the criminal justice system before and after the implementation of the zero-tolerance policy. This will be the focus of the next chapter.

Chapter Four

Pre Versus Post Zero-Tolerance

The zero-tolerance policy was formally introduced by the Winnipeg Police Service on July 12, 1993. This policy initiated a change in police protocol, whereby police were instructed to lay a charge "whether or not the victim wishes to proceed with the matter, and even in circumstances where there are no visible injuries or independent witnesses" (Winnipeg Police Department 1993). As noted in Chapter One, the number of arrests increased dramatically under this new protocol. As well, data from the Family Violence Tracking Project reveal a dramatic increase in the number of stays of proceedings over the first seven years of the operation of the Family Violence Court, from 22 percent in the court's first year of operation to 47 percent by year seven.

While writers such as Ursel (1998a) have interpreted these findings as evidence of the policy's effectiveness in responding to partner violence, critics such as Snider (1995) would argue that such findings are evidence of a "net-widening" effect of the zero-tolerance policy, whereby more individuals – particularly those marginalized by their race/ethnicity and class – are now being brought into the criminal justice system on charges of partner violence. The increases in charges and stays of proceedings raise questions about the impact of the zero-tolerance policy on the processing and sentencing of partner violence cases. To address this issue, a random sample (stratified by offence type) of 677 cases of men and women (18 years and older) charged with criminal acts of violence against their partners over a five-year period (1991 to 1995) was drawn from Winnipeg Police Incident Reports. Of these cases,

half (339) occurred prior to the implementation of the zero-tolerance policy and half (338) occurred after the change in protocol. Of particular interest is whether or not the policy has resulted in a net-widening effect. One way of addressing this issue is to determine whether there are qualitative differences between those cases of partner violence processed prior to the implementation of zero-tolerance and those cases where charges were laid after the policy was implemented. This will be the focus of the first section. The second section will consider whether partner violence cases occurring after the zero-tolerance policy are being treated as seriously as those occurring before the policy in terms of the processing and sentencing of cases by the criminal justice system.

I. QUALITATIVE DIFFERENCES PRE AND POST ZERO-TOLERANCE

Descriptive Analysis

To address the question of whether there are qualitative differences between partner violence cases before and after the zero-tolerance policy, four measures will be employed: violence used by the accused; violence used by the victim; injuries received by the victim; and injuries received by the accused.

The first measure used to determine whether qualitative differences exist before and after the zero-tolerance policy is the violence used by the accused. As indicated in Table 4.1, there are virtually no differences between the two groups in terms of the nature (and number) of violence tactics used. The only exception is that partners in cases occurring before the zero-tolerance policy are more likely than partners in cases occurring after the policy to utter threats/threaten with a weapon (25% pre versus 18% post), although this difference was not

statistically significant. These findings are somewhat consistent with the results from the severity of violence scale. Partners in cases occurring after the zero-tolerance policy are slightly less likely to use major violence than partners in cases occurring before the policy (49% post versus 55% pre) and hence are slightly more likely to use minor violence (16% post versus 10% pre).

Table 4.1: Type of Violence Used by Accused Before and After Zero-Tolerance

Type of Violence Used by Accused	Pre Zero-Tolerance		Post Zero-Tolerance	
Property damage/theft	59	17.5%	44	13%
Utter threats/threaten with weapon*	84	24.9%	60	17.8%
Push/shove/grab/elbow/ Pull/shake/wrestle	126	37.3%	129	38.2%
Bite/Pinch/scratch/poke eye	59	17.4%	58	17.2%
Pull/cut hair	63	18.6%	49	14.5%
Sit on/restrain otherwise	33	9.8%	21	6.2%
Slap (face and/or body)	69	20.4%	77	22.8%
Hit with/threw something	82	24.3%	85	25.1%
Burn/Spray	2	0.6%	7	2.1%
Kick/knee	73	21.6%	62	18.3%
Punch (face and/or body)	74	21.9%	81	24%
Beat (repeat punching)	66	19.5%	62	18.3%
Sexual acts	11	3.3%	3	0.9%
Strangle/choke	25	7.4%	31	9.2%
Slam or push body or head into something	55	16.3%	47	13.9%
Stab/Slash	34	10.1%	21	6.2%
Shoot	0	0%	1	0.3%
Other violence	8	2.4%	3	0.9%

* $p < .05$; ** $p < .01$; *** $p < .001$

No. of violence tactics	923	841
No. of accused who used violence	338 (2.7 per person)	338 (2.5 per person)

The second measure of qualitative differences is violence used by victims. Table 4.2 displays the results of whether the victim used violence by year of charge. The data reveal that victims in cases occurring after the zero-tolerance policy are more likely than victims in cases occurring before the policy to use violence (46% post versus 37% pre). However, there are virtually no differences in terms of the severity of violence used by victims.

Table 4.2: Type of Violence Used by Victim Before and After Zero-Tolerance

Did Victim Use Violence?*	Pre Zero-Tolerance	Post Zero-Tolerance
Yes	37.2% (126)	45.6% (154)
No	62.8% (213)	54.4% (184)
Total	100% (339)	100% (338)

* $p < .05$; ** $p < .01$; *** $p < .001$

The third measure of qualitative differences is the injuries received by victims. The results from Table 4.3 show that victims in cases occurring before the zero-tolerance policy are more likely than victims in cases occurring after the policy to receive injuries (81% pre versus 72% post).

Table 4.3: Victim Injured Before and After Zero-Tolerance

Did Victim Receive Injuries?**	Pre Zero-Tolerance+	Post Zero-Tolerance ±
Yes	81.4% (275)	71.5% (241)
No	18.6% (63)	28.5% (96)
Total	100% (338)	100% (337)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There is 1 missing case.
± There is 1 missing case.

However, the majority of injuries (76% pre versus 77% post) are minor in nature. As indicated in Table 4.4, the most frequent injuries involved bruises, swelling, welts or redness (53.8% pre versus 42.7% post) or cuts, broken skin, scratches or bite marks (42.9% pre versus 48.5% post).

A final measure of qualitative differences is the injuries received by the accused. The results from the descriptive analysis show little difference in terms of the frequency and severity of injuries received by the accused. Specifically, partners charged after the zero-tolerance policy are only slightly more likely than partners charged before the policy to receive injuries as a result of the incident (28% post versus 22% pre). These injuries are minor in nature, however, with more minor injuries occurring after the policy than before (94% post versus 88% pre).

Table 4.4: Type of Injuries Received by Victim Before and After Zero-Tolerance

Type of Injury Received by Victim	Pre Zero-Tolerance		Post Zero-Tolerance	
Bloody or broken nose	24	8.7%	15	6.2%
Cuts/broken skin/ scratches/bite marks	118	42.9%	117	48.5%
Bruises/swelling/welts/ redness*	148	53.8%	103	42.7%
Loss of hair	7	2.5%	4	1.7%
Eye damage/black eye*	28	10.2%	12	5%
Sprains/sore body parts	63	22.9%	65	27%
Spray-related burns	0	0%	1	0.4%
Broken bones/fractures	3	1.1%	1	0.4%
Lacerations/slashes	37	13.5%	27	11.2%
Imbedded glass/other object	0	0%	0	0%
Other burns*	0	0%	4	1.7%
Chipped/lost teeth	3	1.1%	0	0%
Sexually violated	8	2.9%	6	2.5%
Stab wounds	16	5.8%	14	5.8%
Gunshot wounds	0	0%	0	0%
Concussion/head injury	2	0.7%	1	0.4%
Internal bleeding/organ or artery damage	6	2.2%	4	1.7%
Loss of limb/body part	0	0%	1	0.4%
Loss of consciousness	3	1.1%	4	1.7%
Coma	0	0%	0	0%
Brain damage	0	0%	0	0%
Paralysis	0	0%	0	0%
Death	0	0%	0	0%
Other type of injury	0	0%	1	0.4%

* $p < .05$; ** $p < .01$; *** $p < .001$

No. of injuries received	466	380
No. of victims who received injuries	275 (1.7 per person)	241 (1.6 per person)
No. of missing cases	1	1

From a review of the results of the descriptive analysis, we observe that the violence tactics used and injuries received are either the same or slightly more serious in partner violence cases occurring before the zero-tolerance policy than after. Indeed, victims of partners accused before the policy are slightly more likely to use violence and are slightly more likely to receive injuries, although there are little differences in terms of the severity of violence and injuries. Further, partners charged before the policy are slightly more likely to use major violence. While accused partners are slightly more likely to receive injuries after the policy than before, these injuries are more likely to be minor. Thus, while qualitative differences exist between partner violence cases occurring before and after the policy, the differences are small. This suggests that the zero-tolerance policy is simply bringing a greater *number* of partner violence cases into the criminal justice system rather than bringing in more serious partner violence cases. If anything, zero-tolerance has resulted in a slight increase in more minor partner violence cases, supporting the argument for net-widening.

II. DIFFERENCES IN THE CJS TREATMENT OF PARTNER VIOLENCE PRE AND POST ZERO-TOLERANCE

i. Descriptive Analysis

Six measures will be used to examine the impact of the zero-tolerance policy on the processing and sentencing of partner violence cases: case attrition; dispositions; nature of charges; number of charges; employment status and race of the accused; and victim charges.

The first measure of the impact of the zero-tolerance policy is the case attrition levels. Table 4.5 presents the results of case outcome crosstabulated by year of charge. The data

reveal case attrition to be considerably higher after the zero-tolerance policy than before (73% post versus 58% pre), largely as a consequence of the high number of stays of proceedings after the policy than before (64% post versus 50% pre). The consequence of the increase in case attrition is a decrease in the number of cases proceeding to sentencing after the zero-tolerance policy than before (27% post versus 42% pre). This finding coincides with the finding of Ursel (2000) that the stay rate increased from 22 percent in 1990/91 to 32 percent in 1991/92 to 41 percent in 1992/93 and finally to 47 percent in 1993/94. Given that one of the goals of the Family Violence Court was to reduce attrition levels for partner violence cases, the findings of the present analysis suggest a net-widening effect of the zero-tolerance policy, whereby more cases are entering the criminal justice system, yet an increasing number are resulting in attrition.

The second measure of the impact of the zero-tolerance policy is the sentencing patterns of partner violence cases. Table 4.5 presents these results. The data reveal that of the cases proceeding to sentencing, accused partners in cases occurring before the zero-tolerance policy are as likely as accused partners in cases occurring after the policy to receive an absolute discharge (3% pre versus 0% post), conditional discharge (15% pre versus 17% post), fine, community service work or restitution (2% pre versus 4% post), suspended sentence plus probation (45% pre versus 42% post) and incarceration (35% pre versus 36% post). Recall from Chapter One that one of the objectives of the Family Violence Court was to provide more consistent and appropriate sentencing to strengthen the safety of the victim, to mandate treatment for batterers and to increase monitoring of offenders (through probation) (Ursel 1998b). Indeed, Ursel (1996) found that four years after the opening of the

Family Violence Court, we witnessed a dramatic change in sentencing patterns, with probation becoming the most frequent sentence (74%) followed by incarceration (29%). Yet, the findings from the present study suggest that while the implementation of the zero-tolerance policy has not had a negative impact on the sentencing of partner violence cases, it has not had a positive impact either. In fact, it would appear that the police policy has had virtually *no* impact on the sentencing of partner violence cases.

Table 4.5: Accused Most Serious Outcome Before and After Zero-Tolerance

Accused Most Serious Outcome***	**Pre Zero-Tolerance (n = 338)+**	**Post Zero-Tolerance (n = 334)∀**
Acquitted, Discharged or Dismissed	8.9% (29)	8.1% (27)
Stay of Proceedings	49.7% (168)	64.4% (215)
ATTRITION	**58.3% (197)**	**72.5% (242)**
PROCEED TO SENTENCE	**41.7% (141)**	**27.5% (92)**
Absolute and Conditional Discharge, Fine, CSW or Restitution	19.9% (28)	21.7% (20)
Suspended Sentence plus Probation	45.4% (64)	42.4% (39)
Incarceration (provincial or federal)	34.8% (49)	35.9% (33)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There is 1 missing case.
∀ There are 4 missing cases.

In a similar vein, an examination of the nature of charges laid against the accused shows virtually no difference in terms of the severity of charges laid against partners in cases occurring before and after the zero-tolerance policy (see: Table 4.6). Specifically, accused in cases occurring before the zero-tolerance policy are almost as likely as accused in cases occurring after the policy to be charged with less serious offences such as level 1 and other assaults (58% pre versus 63% post). In turn, accused partners in cases occurring before the zero-tolerance policy are only slightly more likely than accused partners in cases occurring after the policy to be charged with more serious offences such as level 2 and 3 assaults, sexual offences, robbery and attempt murder, manslaughter or murder (42% pre versus 37% post). It is notable, however, that the majority of partner violence cases (both before and after the zero-tolerance policy) involve less serious offences. That virtually no differences exist in terms of the severity of charges laid before and after the zero-tolerance policy suggests little or no change in the nature of the charges laid by the police.

Table 4.6: Accused Most Serious Charge Before and After Zero-Tolerance

Accused Most Serious Charge	**Pre Zero-Tolerance**	**Post Zero-Tolerance**
Non-violent charge	0% (0)	0% (0)
Level 1 and other assaults	57.8% (196)	63% (213)
Level 2 and 3 assaults	40.4% (137)	35.2% (119)
Sexual offences	0.9% (3)	1.2% (4)
Robbery	0.6% (2)	0.3% (1)
Attempt murder, Manslaughter or Murder	0.3% (1)	0.3% (1)
Total	100% (339)	100% (338)

* $p < .05$; ** $p < .01$; *** $p < .001$

The fourth variable which is used to measure the impact of the zero-tolerance policy is the number of charges. Table 4.7 displays the results from the number of charges laid against the accused crosstabulated by year of charge. The data reveal that partners accused in cases occurring before the zero-tolerance policy are slightly more likely than partners accused in cases occurring after the policy to be charged with two or more offences (48% pre versus 39% post).

Table 4.7: Accused Number of Charges Before and After Zero-Tolerance

Accused Total Number of Charges	**Pre Zero-Tolerance**		**Post Zero-Tolerance**	
1 charge	176	(51.9%)	206	(60.9%)
2 charges	94	(27.7%)	80	(23.7%)
3 charges	40	(11.8%)	25	(7.4%)
4 charges	19	(5.6%)	18	(5.3%)
5 charges	10	(2.9%)	9	(2.9%)
Total	339	(100%)	338	(100%)

* $p < .05$: ** $p < .01$; *** $p < .001$

The fifth measure of the impact of the zero-tolerance policy is the employment status and race of the accused. Table 4.8 presents the results of employment status crosstabulated by year of charge. The findings indicate that individuals who are in more marginalized economic positions - those who are unemployed or on social assistance - are over-represented in the data. However, no differences were found before and after the policy. Specifically, accused partners who are either unemployed or on social assistance/welfare are

equally as likely to be charged before the zero-tolerance policy as they are after the policy (69% pre versus 69% post).

Table 4.8: Employment Status of Accused Before and After Zero-Tolerance

Employment Status of Accused	**Pre Zero-Tolerance+**		**Post Zero-Tolerance±**	
Employed[1]	102	(30.9%)	101	(31.5%)
Unemployed/Welfare	228	(69.1%)	220	(68.5%)
Total	330	(100%)	321	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There are 9 missing cases.
± There are 17 missing cases.

Aboriginal people are similarly over-represented in the data relative to their numbers in the general population. The data reveal a slight increase in the number of Aboriginal accused charged after the policy than before (51% post versus 46% pre) and, consequently, a slight decrease in the number of Caucasian accused after the policy than before (42% post versus 48% pre). However, if we examine the men-only sample (who make up the majority of persons charged with violent offences) a different picture emerges (see: Table 4.9). Specifically, before the zero-tolerance policy, Caucasian men were more likely than Aboriginal men to be charged with a partner violence offence (55% Caucasian versus 37% Aboriginal). After the policy, this relationship is reversed; Aboriginal men are more likely than Caucasian men to be charged with partner violence (56% Aboriginal versus 36%

[1] The category "employed" includes students.

Caucasian). These findings would seem to lend support to Snider's (1998) argument about the net-widening effect of mandatory charging policies on Aboriginal men. In particular, Snider (1998) argues that mandatory charging policies are more about punishing and controlling marginalized groups than they are about making the lives of women more safe or eliminating the violence. She argues that it is largely lower income, visible minority and urban Aboriginal women who have suffered the damaging consequences of mandatory charging policies. These are the women whose partners are most vulnerable to these police practices as they are the abusers with the lowest resources and the least ability to resist criminal justice intervention into their lives.

Table 4.9: Race of Men Accused Before and After Zero-Tolerance

Race of Men Accused**	Pre Zero-Tolerance+		Post Zero-Tolerance	
Caucasian	95	(55.2%)	57	(35.6%)
Aboriginal	63	(36.6%)	89	(55.6%)
Other[2]	14	(8.1%)	14	(8.8%)
Total	172	(100%)	160	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There is 1 missing case.

[1] The "other" category pre zero-tolerance includes accused described by police as Asian, Black, East Indian, Mulatto, Filipino, Portuguese and Non-white. The "other" category post zero-tolerance includes accused described by police as Asian, Black, East Indian, Mulatto. Non-white, Filipino and Portuguese. As the sample of "other" accused is so small, it would be misleading to interpret.

The final measure to be examined is the frequency and severity of charges laid against victims. The data reveal that victims in cases occurring after the zero-tolerance policy are slightly more likely than victims in cases occurring before the policy to be charged by police alongside their partners (33% post versus 27% pre). There were virtually no differences, however, in terms of the severity of charges laid against victims before and after the policy. Specifically, 74 percent of the charges laid before the policy and 76 percent of the charges laid after the policy involved less serious offences (i.e. non-violent, level 1 and other assaults) (see: Table 4.10). Similar to the charges laid against the accused, it is noteworthy that the majority of partner violence charges laid against victims are for relatively minor offences.

Table 4.10: Victim Nature of Charges Before and After Zero-Tolerance

Victim Most Serious Charge *	**Pre Zero-Tolerance**		**Post Zero-Tolerance**	
Non-violent charge	10	(10.9%)	2	(1.8%)
Level 1 and other assaults	58	(63%)	83	(74.1%)
Level 2 and 3 assaults	24	(26.1%)	27	(24.1%)
Sexual offences	0	(0%)	0	(0%)
Robbery	0	(0%)	0	(0%)
Attempt murder, Manslaughter or Murder	0	(0%)	0	(0%)
Total no. of victims charged	92	(100%)	113	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

As double-charging (the phenomenon whereby victims are charged alongside their partners for a domestic violence offence) has been identified by women's groups and victims

as an important issue, it is necessary to examine the percentage of charges laid against victims before and after the zero-tolerance policy. Table 4.11 presents the results of this crosstabulation. The findings reveal a slight increase in the number of charges laid against victims after the zero-tolerance policy (33% post versus 27% pre). Although the increase is small, this finding does suggest a slight increase in double-charging following the implementation of the zero-tolerance policy. In other words, while double-charging was an issue prior to the zero-tolerance policy, it becomes more of an issue after.

Table 4.11: Double-Charging Before and After Zero-Tolerance

Was Victim(s) Charged?	Pre Zero-Tolerance		Post Zero-Tolerance	
Yes	92	(27.1%)	113	(33.4%)
No	247	(72.9%)	225	(66.6%)
Total	339	(100%)	338	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

Based on the descriptive analysis, three observations can be made. First, the zero-tolerance policy appears to have had little significant or substantial effect on the nature of charges laid by police, as well as the sentencing patterns. Where differences emerge, however, is in terms of the case attrition levels and the race of the accused. The second observation that can be made from the descriptive analysis is a net-widening effect of the zero-tolerance policy whereby more partner violence cases are entering the criminal justice system yet an increasing number are resulting in attrition. Finally, the data suggest that the zero-tolerance policy's removal of discretion from the police level has not reduced the over-

representation of marginalized groups as accused. Indeed, the data reveal an apparent net-widening for Aboriginal men.

If we examine case attrition levels by race before and after the policy, we find virtually no difference between Aboriginal and Caucasian men accused. In particular, the incidence of case attrition for Aboriginal men accused is similar to the incidence of case attrition for Caucasian men accused both before (45% versus 47%) and after (56% versus 60%) the zero-tolerance policy (Table 4.12). When we examine sentencing patterns, however, a different picture emerges. Specifically, while Aboriginal men are equally as likely in cases occurring before and after the policy to receive a conditional discharge (9% pre versus 8% post), Caucasian men in cases occurring after the policy are far more likely than Caucasian men in cases occurring before the policy to receive a conditional discharge (23% post versus 8% pre). On the other hand, while Caucasian men are equally as likely in cases occurring before and after the policy to receive a suspended sentence plus probation (52% pre versus 46% post), Aboriginal men in cases after the policy are far more likely than Aboriginal men in cases before the policy to receive a suspended sentence plus probation (41% post versus 29% pre). This finding appears to lend support to Snider's (1998) argument that mandatory charging policies serve to controlling marginalized groups through enhanced surveillance (i.e., probation and incarceration).

Perhaps the most important difference which emerges when race is considered is that Caucasian and Aboriginal accused after the zero-tolerance policy are less likely than Caucasian and Aboriginal accused before the policy to receive a sentence of incarceration. Specifically, 40 percent of Caucasian accused received a sentence of incarceration before the

policy versus only 32 percent of Caucasian accused who received an incarceration sentence after the policy. Similarly, 62 percent of Aboriginal accused received a sentence of incarceration before the policy versus only 51 percent after the policy. While the zero-tolerance policy does not appear to have had a differential impact on Caucasian and Aboriginal accused in terms of incarceration, that Aboriginal men are still far more likely to receive sentences of incarceration both before and after the zero-tolerance policy lends support to Snider's (1995) argument that criminalization of male violence functions to control groups who are vulnerable on the basis of their race, class, gender or ethnicity.

Table 4.12: Most Serious Outcome Before and After Zero-Tolerance by Race of Accused

	Pre Zero-Tolerance+		**Post Zero-Tolerance±**	
Accused Most Serious Outcome* **	**Aboriginal (n=62)**	**Caucasian (n=95)**	**Aboriginal (n=88)**	**Caucasian (n=55)**
Acquitted, Discharged or Dismissed	16.1% (10)	12.6% (12)	10.2% (9)	12.7% (7)
Stay of Proceedings	29% (18)	34.7% (33)	45.5% (40)	47.3% (26)
ATTRITION	**45.1% (28)**	**47.3% (45)**	**55.7% (49)**	**60% (33)**
PROCEED TO SENTENCE	**54.9% (34)**	**52.7% (50)**	**44.3% (39)**	**40% (22)**
Absolute and Conditional Discharge, Fine, CSW or Restitution	8.8% (3)	8% (4)	7.7% (3)	22.7% (5)
Suspended Setence plus Probation	29.4% (10)	52% (26)	41% (16)	45.5% (10)
Incarceration (provincial or federal)	61.8% (21)	40% (20)	51.3% (20)	31.8% (7)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There are 2 missing cases.
± There are 3 missing cases.

While we know that the level of attrition is higher after the zero-tolerance policy than before – suggesting a net-widening effect of the protocol – we have little or no understanding of what explains these differences in case attrition levels. We do know from anecdotal evidence that one of the main reasons for high stays of proceedings is complainants' refusal to testify against their partners. The following section will examine the extent to which differences in case attrition levels before and after the zero-tolerance policy can be explained by legal, event and social variables. To accomplish this, a multivariate analysis involving a series of logistic regressions will be performed.

ii. Multivariate Analysis

Table 4.13 provides the results of the logistic regression on case attrition for legal, event and social variables. The first model contains the results for the year of charge variable without any controls.

Table 4.13: Results of Logistic Regression on Case Attrition for Legal, Event and Social Variables

	Year of Charge	**Legal Variables**	**Event Variables**	**Social Variables**	**Full Model**
	n = 672	**n = 667**	**n = 669**	**n = 642**	**n = 636**
Covariates	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**	**Odds Ratio**
Year of Charge					
Post ZT	1.883	1.904	1.685	2.036	1.92
Pre ZT	1.000	1.000	1.000	1.000	1.000
Constant	1.397	3.921	0.827	3.799	13.364
-2 Log Likelihood	852.434	703.532	775.54	756.49	654.665

*p < 0.05; ** p <.01; *** p < .001

Consistent with the descriptive analysis, the odds are different in both groups. The results in Table 4.13 show that partners charged after the zero-tolerance policy have 88 percent higher odds of case attrition than partners charged before the policy. Is this finding due to more minor charges being laid after the zero-tolerance policy? Is this finding the result of more minor injuries received by victims of partners after the zero-tolerance policy? Or, is this finding due to the social characteristics of the accused? These are particularly important questions that need to be answered.

The second model in Table 4.13 controls for legal variables (previous police contact, nature of charges, number of charges and frequency of victim charges). The results show that controlling for legal variables, the odds of case attrition for partners charged after the zero-tolerance policy remain virtually the same. Legal variables appear to have *no* effect on the greater odds of case attrition for partners charged after the zero-tolerance policy. This is consistent with the descriptive analysis which found no differences in terms of the nature and number of charges laid against accused partners before and after the zero-tolerance policy.

Event variables (degree of violence used by accused, weapons used by accused, victim use of violence and frequency and degree of injuries received by victim) are controlled for in the third model in Table 4.13. The results show that controlling for event variables, the odds of case attrition for partners charged after the zero-tolerance policy compared to partners charged before the policy are reduced by 19 percent. It appears, then, that factors such as the degree of violence used by accused, the frequency of weapons used by accused, the frequency of violence used by the victim and the frequency and degree of injuries

received by victim in fact reduce the odds of attrition for partner violence cases occurring after the zero-tolerance policy in comparison to partner violence cases occurring before the policy.

The fourth model in Table 4.13 controls for social factors (race, employment status and sex of accused). The results show that controlling for social factors, the odds of case attrition for partners charged after the policy compared to those charged before the policy are increased by 16 percent. It appears that the greater odds of case attrition for partners charged after the policy is amplified by factors such as race, employment status and sex of the accused. Social variables, therefore, play a role in the greater odds of case attrition for partners charged after the zero-tolerance policy.

When legal, social and event variables are entered into the full model in Table 4.13, the odds of case attrition for partners charged after the policy relative to partners charged before the policy are increased slightly (4%). It appears that social variables such as the race, employment status and sex of the accused increase the differences in case attrition for partner violence cases before and after the zero-tolerance policy.

While the logistic regressions performed above provide insight into the impact of legal, event and social variables on differences in case attrition before and after the zero-tolerance policy, they cannot tell us which variables are important for partners charged both before and after the policy and they do not allow for a comparison of cases pre and post zero-tolerance. To give us a sense of the impact of legal, event and social variables for each group on case attrition, separate logistic regressions were performed for partners charged before and after the zero-tolerance policy.

Social Variables, Year of Charge and Case Attrition

As the logistic regressions in Table 4.13 found that it is the block of social variables that increased the differences in case attrition before and after the zero-tolerance policy, it is important to examine the impact of each of these variables on case attrition. Table 4.14 contains the results from these regressions. While being Aboriginal decreases the odds of attrition both before and after zero-tolerance, the decrease is greater before zero-tolerance than after. Specifically, being Aboriginal decreased the odds of attrition by 38 percent before zero-tolerance and by 29 percent after zero-tolerance. Employment status also had a decreasing effect on attrition both before and after the policy was implemented, although this effect is less so than for race. Being unemployed or on social assistance decreased the odds of attrition by 19 percent before zero-tolerance and by 12 percent after zero-tolerance. The sex of the accused had an even greater influence: being male decreased the odds of case attrition by 70 percent before zero-tolerance and by 77 percent after zero-tolerance.

Table 4.14: Results of Logistic Regression on Incidence of Case Attrition for Social Variables by Year of Charge

	Pre Zero-Tolerance	**Post Zero-Tolerance**
Covariates	**Odds Ratio**	**Odds Ratio**
Block 3 (Social Variables)	**n = 327**	**n = 315**
	-2 Log Likelihood = 418.068	**-2 Log Likelihood = 337.573**
Race of Accused		
Aboriginal	0.621	0.706
Other	0.753	1.119
Caucasian	1.000	1.000
Employment Status of Accused		
Unemployed	0.812	0.88
Employed	1.000	1.000
Sex of Accused		
Male	0.297	0.233
Female	1.000	1.000

CONCLUDING REMARKS

One consequence of the implementation of the zero-tolerance policy by the Winnipeg Police Service in 1993 was a dramatic increase in the number of arrests for domestic violence. Consistent with Ursel's (1998a) research, the data from the present study also reveal a significant increase in the level of case attrition. While 58 percent of charges resulted in attrition prior to the policy, 73 percent of charges resulted in attrition after the policy. This increase raises questions about the impact of the zero-tolerance policy on the processing and sentencing of partner violence cases. Are we to interpret these changes as evidence of the policy's effectiveness – or – as evidence of a "net widening" effect?

One way of determining whether the zero-tolerance policy contributed to an increased effectiveness of the criminal justice response to domestic violence is to examine the specific nature of the events which resulted in charges being laid before and after the implementation of the policy. A descriptive analysis of partner violence cases pre and post zero-tolerance revealed that while there are some qualitative differences between cases occurring before and after the policy was implemented, these differences are small. For instance, there are virtually *no* differences in terms of the nature (and number) of violence tactics used by accused. While victims in cases occurring after the zero-tolerance policy are more likely than victims in cases occurring before the policy to use violence (46% post versus 37% pre), there are virtually no differences in the severity of violence used by victims. As well, victims in cases occurring before the policy were more likely to receive injuries (81% pre versus 72% post), although the majority of injuries were of a minor nature. Given the similar characteristics of partner violence events occurring before and after the zero-tolerance policy, one would have expected the criminal justice response to these events to also be similar. While the descriptive analysis found that those cases which proceeded to sentence received virtually the same distribution of dispositions before and after the policy, it remains the case that the incidence of stays of proceedings – which (at 50%) was high prior to the implementation of zero-tolerance – rose even higher (to 64%) once the policy is in place. In other words, even though the nature of the events which led to a charge appear to be comparable, those occurring after zero-tolerance are more likely to result in stays of proceedings. On the one hand, this suggests that the zero-tolerance policy is working against the initial objective of the Family Violence Court to reduce the attrition levels in partner violence cases (Ursel 998b).

violence cases (Ursel 998b). This finding is especially important in light of the concerns raised by victims= advocates prior to the creation of the Family Violence Court that a large proportion of wife abuse cases end in a stay of proceedings and, therefore, never proceed to court (Ursel 1992b). On the other hand, the high number of stay of proceedings could be interpreted as an indicator of Crown sensitivity and women=s agency; Crown attorneys may be staying the proceedings at the request of complainants.

The results of the logistic regression indicated that partners charged after the zero-tolerance policy had 88 percent higher odds of case attrition than partners charged before the policy. Controlling for event variables did reduce the odds of case attrition for partners charged after the zero-tolerance policy compared to partners charged before the policy (by 19%). Yet, even when event variables were controlled for, those partners charged after the policy still had 69 percent higher odds of case attrition than partners charged before the policy was implemented. Moreover, one would expect that legal variables (such as previous police contact, nature of the charges, number of charges and frequency of victim charges) would explain the difference in case attrition for the two groups. This, however, was not the case. The results of the logistic regression show that even when controlling for legal variables, the odds of case attrition are virtually the same for partners charged after the policy as those charged before. Such findings lead one to suggest that B rather than increasing the effectiveness of the criminal justice response to partner violence B the zero-tolerance policy has resulted in such an increase in the number of cases entering the criminal justice system that even more cases are resulting in attrition in order to manage the workload of the court.

Snider (1998) has argued that policies like zero-tolerance represent a "net widening" on the part of the criminal justice system, whereby more individuals – especially those marginalized by their race/ethnicity and class – are increasingly being targeted for criminalization. The results of the descriptive analysis show that individuals who are in more marginalized economic positions are over-represented in the data; 69 percent of those charged both before and after the policy were unemployed or on social assistance at the time of arrest. Aboriginal people are similarly over-represented. In particular, Aboriginal men represented 37 percent of the men charged prior to the policy and 56 percent of those charged after the policy. Indeed, the results of the logistic regression indicate that social variables increased the differences in case attrition before and after zero-tolerance. Such findings suggest that while marginalized groups have historically been over-represented in the criminal justice system, zero-tolerance has intensified this process. Nevertheless, while the over-representation of Aboriginal men increased with the implementation of the policy, there is evidence to suggest that the increasing case load of the court which accompanied the new charging directive had some impact on the likelihood of case attrition; being Aboriginal decreased the odds of attrition by 29 percent post zero-tolerance compared to 38 percent pre zero-tolerance. Similarly, the descriptive analysis indicated that sentencing patterns for Aboriginal men changed. While 62 percent of Aboriginal men received a sentence of incarceration before the policy, 51 percent received a sentence of incarceration after the policy. However, that Aboriginal men were more likely than Caucasian men to receive prison sentences lends support to Snider's (1995) argument that criminalization of male violence

is more about controlling groups who are vulnerable on the basis of their race and class position.

One of the findings from the logistic regression (Table 4.14) suggests that sex is an important social variable to consider in accounting for the impact of the zero-tolerance policy. The next chapter will consider the effects of the zero-tolerance policy on men and women accused of partner violence.

Chapter Five

Women Versus Men

The number of women being charged for domestic violence increased dramatically with the implementation of the zero-tolerance policy. Within the first three months (July to September) of the policy's enforcement, for example, there were 190 women arrested for domestic violence – an increase from 156 for all of 1992 (*Winnipeg Free Press*, 20 December 1993). This increase led to concerns being raised in the media and among the public over whether women are becoming increasingly violence. Despite the explosion of public concern in the past ten years, however, women's violence is an issue which has received little attention in academic research (Shaw 1995). Indeed, to date, the Family Violence Tracking Project has not included an analysis of gender, especially in terms of whether the zero-tolerance policy is having a differential impact on the processing and sentencing of women and men.

Data from the present study reflect the increases in charges against women for partner violence that resulted from the implementation of the zero-tolerance policy. Table 5.1 presents the distribution of women's and men's charges for partner and non-partner violence by year. These data are derived from the initial random sample (n = 1002) of women and men charged with violent offences between 1991 and 1995. Whereas partner violence represented only 23 percent of women's charges in 1991, the proportion increased to 57 percent in 1993 (when zero-tolerance came into effect) and remained at that level for 1994 and 1995. By comparison, partner violence charges make up a significant proportion of

men's charges in each of the five years and, while the proportion increased over the five-year period (from 43% in 1991 to 64% in 1995), it is not as dramatic as for women accused.

Table 5.1: Partner versus Non-partner Charges Against Women and Men Accused by Year of Charge

	Women Accused			Men Accused		
	Partner	**NonPartner**	**Total**	**Partner**	**NonPartner**	**Total**
1991	22.8% (13)	77.2% (44)	100% (57)	43% (34)	57% (45)	100% (79)
1992	26.8% (22)	73.2% (60)	100% (82)	54.7% (52)	45.3% (43)	100% (95)
1993	57.3% (75)	42.8% (56)	100% (131)	59.6% (68)	40.4% (46)	100% (114)
1994	56.8% (67)	43.2% (51)	100% (118)	59.6% (65)	40.4% (44)	100% (109)
1995	58.4% (66)	41.6% (47)	100% (113)	63.5% (66)	36.5% (38)	100% (104)
Total	48.5% (243)	51.5% (258)	100% (501)	56.9% (285)	43.1% (216)	100% (501)

This increase in the number of women charged with domestic violence raises questions about the impact of the zero-tolerance policy on women. As discussed in Chapter One, researchers employing the Conflict Tactics Scale as a measure for partner violence would interpret this increase as evidence that the criminal justice system is working more fairly; women (who are "men's equals in violence") are now being charged alongside men for their violent behaviour. While the claim that women and men are "equals in violence" is one that is highly contested by feminist writers, the lack of any in depth research on the qualitative nature of partner violence prevents us from challenging it. To address this issue, the random sample of 528 women and men charged by the Winnipeg Police Service with criminal acts of violence against their partners over the five-year period, 1991 to 1995, was utilized: 243 women and

285 men. The first section of the chapter will consider whether there are qualitative differences between men's and women's partner violence. The second section of the chapter will focus on whether women's and men's partner violence cases are being treated similarly by the criminal justice system.

I. QUALITATIVE DIFFERENCES BETWEEN WOMEN'S AND MEN'S PARTNER VIOLENCE

Descriptive Analysis

To address the question of whether there are qualitative differences between women's and men's partner violence, five measures will be employed: violence used by the accused; violence used by the victim; injuries received by the victim; injuries received by the accused; and who contacted the police for assistance.

The first measure of qualitative differences is the violence tactics used by the accused. Table 5.2 presents the results of violence tactics crosstabulated with the sex of the accused. The findings suggest that men are using more violence tactics per person than women accused (2.9 versus 2.3) and are more likely to use serious forms of violence than women. Specifically, men are most likely to push, shove or grab (52% versus 28%), slam or push body into something (27% versus 3%), sit on or restrain (15% versus 2%) and strangle or choke (14% versus 3%), while women are most likely to hit with or throw something (32% versus 17%), bite, pinch, scratch or poke eye (28% versus 5%) and stab or slash (9% versus 2%). The findings from the severity of violence scale are consistent with the violence tactics used. with men accused being far more likely than women accused to use major forms of

violence (61% versus 40%).

Table 5.2: Type of Violence Used by Accused by Sex of Accused

Type of Violence Used by Accused	Women Accused		Men Accused	
Property damage/theft **	23	9.5%	52	18.2%
Utter threats/threaten with weapon	38	15.7%	63	22.1%
Push/shove/grab/elbow /pull/shake/wrestle ***	68	28.1%	147	51.6%
Bite/Pinch/scratch/poke eye ***	67	27.7%	14	4.9%
Pull/cut hair	40	16.5%	47	16.5%
Sit on/restrain other wise ***	4	1.7%	43	15.1%
Slap (face and/or body)	54	22.3%	67	23.5%
Hit with/threw something ***	77	31.8%	49	17.2%
Burn/Spray	5	2.1%	4	1.4%
Kick/knee	47	19.4%	57	20%
Punch (face and/or body)	55	22.7%	72	25.3%
Beat (repeat punching)	44	18.2%	62	21.8%
Sexual acts **	0	0%	10	3.5%
Strangle/choke ***	6	2.5%	39	13.7%
Slam or push body or head into something ***	6	2.5%	76	26.7%
Stab/Slash ***	22	9.1%	6	2.1%
Shoot	0	0%	1	0.4%
Other violence **	0	0%	10	3.5%
No. of violence tactics	556		819	
No. of accused who used violence	242 (2.3 per person)		285 (2.9 per person)	

* $p < .05$; ** $p < .01$; *** $p < .001$

The finding that women accused are more likely to hit with or throw objects or stab or slash than men accused is reflected in the use of weapons. Women accused were more

likely than men accused to use weapons (42% versus 28%). Table 5.3 presents the type of weapon used crosstabulated by the sex of the accused. The most frequent weapon used by women accused was beer bottles and other sharp objects such as knives or scissors. These objects accounted for 66 percent of the weapons used by women accused (versus 51% for men accused). Men accused used firearms in three of the cases, and were twice as likely as women to use blunt objects like bats, wooden boards, hammers or metal pipes (19% versus 9%).

Table 5.3: Weapons Used by Sex of Accused

Type of Weapon*	**Women Accused +**	**Men Accused +**
Firearm	0 (0%)	3 (4%)
Beer bottle	28 (27%)	13 (16%)
Sharp object	40 (39%)	28 (35%)
Blunt object	9 (9%)	15 (19%)
Other weapon	44 (43%)	32 (40%)
Total no. of accused using weapons	103 (42% of accused)	80 (28% of accused)

+ Percentages add up to more than 100 due to multiple responses.

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.3 also indicates that a considerable number of "other objects" were used by women and men accused (43% versus 40%). "Other objects" included items such as: bathroom plungers, telephones, wooden spoons, ashtrays, coffee pots, dishes, books, hair brushes, TV remote controls and running shoes. Taken together, this list suggests that

virtually any object which is readily accessible in a domestic setting could potentially be thrown or used to hit with during the course of a violent event.

The second measure of qualitative differences is the frequency and nature of violence used by the victims. Table 5.4 displays the results of the victim's use of violence crosstabulated by the sex of the accused. From an examination of the data, we find that women's victims (who are largely men) are almost three times more likely than men's victims (who are largely women) to use violence against their partners.

Table 5.4: Victim Used Violence by Sex of Accused

Victim Use Violence?***	**Women Accused**	**Men Accused**
Yes	65% (158)	23.5% (67)
No	35% (85)	76.5% (218)
Total	100% (243)	100% (285)

* $p < .05$; ** $p < .01$; *** $p < .001$

In terms of the nature of the violence used, women's victims (who are largely men) are more likely to push, pull or shove (56% versus 33%), punch face and/or body (24% versus 6%), slam or push body or head into something (18% versus 3%) and sit on or restrain (17% versus 0%), while men's victims (who are largely women) are more likely to hit with or throw something (25% versus 10%) and bite, pinch, scratch or poke eye (21% versus 5%) (see: Table 5.4). In short, the violence used by women's victims mirrors the violence of the men accused, while the violence used by men's victims mirrors that of the women accused.

Further, an examination of Table 5.5 reveals that women's victims are also using more violence tactics per person than victims of men accused (2.1 versus 1.4).

Table 5.5: Type of Violence Used by Victim by Sex of Accused

Type of Violence Used by Victim	**Women Accused**		**Men Accused**	
Property damage/theft	16	10.1%	7	10.4%
Utter threats/threaten with weapon *	14	8.9%	1	1.5%
Push/shove/grab/elbow/ pull/shake/wrestle **	89	56.3%	22	32.8%
Bite/Pinch/scratch/ poke eye ***	8	5.1%	14	20.9%
Pull/cut hair	24	15.2%	5	7.5%
Sit on/restrain otherwise ***	28	17.7%	0	0%
Slap (face and/or body)	24	15.2%	5	7.5%
Hit with/threw something **	16	10.1%	17	25.4%
Burn/Spray*	1	0.6%	4	6%
Kick/knee	24	15.2%	7	10.4%
Punch (face and/or body) **	38	24.1%	4	6%
Beat (repeat punching) *	18	11.4%	2	3%
Sexual acts	0	0%	0	0%
Strangle/choke	10	6.3%	1	1.5%
Slam or push body or head into something **	28	17.7%	2	3%
Stab/Slash *	0	0%	2	3%
Shoot	0	0%	0	0%
Other violence	0	0%	0	0%
No. of violence tactics	338		93	
No. of victims who used violence	158 (2.1 per person)		67 (1.4 per person)	

* $p < .05$: ** $p < .01$; *** $p < .001$

One measure which has been absent from Conflict Tactics Scale research is the outcome (i.e., injury) of the violence (Browning & Dutton 1986; DeKeseredy & MacLean 1998; Dobash & Dobash 1992; Ferraro & Johnson 1983; Schwartz & DeKeseredy 1993; Johnson 1996). In the present study, women's victims are almost as likely as men's victims to receive injuries as a result of partner violence (73% versus 78%). Table 5.6 presents the results of type of injury received by the victim crosstabulated by the sex of the accused. The findings reveal that men's victims are more likely to receive bruises, swelling, welts or redness (65% versus 32%), sprains or soreness (37% versus 10%) and eye damage (12% versus 3%). Women's victims are more likely to receive cuts, broken skin, scratches or bite marks (63% versus 32%), lacerations or slashes (16% versus 6%) and stab wounds (9% versus 1%). The findings from the severity of injury scale found that women's victims were more likely to receive major injuries than men's victims (24% versus 10%). Nevertheless, there were no significant differences in terms of medical attention required by men's and women's victims (15% versus 21%).

The fourth measure of qualitative differences is the frequency and nature of injuries received by the accused. As noted in Table 5.7, women accused are almost seven times more likely than men to receive injuries (48% versus 7%).

Table 5.6: Type of Injury Received by Victim by Sex of Accused

Type of Injury Received by Victim	Women Accused		Men Accused	
Bloody or broken nose	12	6.8%	21	9.4%
Cuts/broken skin/scratches/bite marks ***	112	63.3%	73	32.7%
Bruises/swelling/welts/ redness ***	57	32.2%	145	65%
Loss of hair *	7	4%	2	0.9%
Eye damage/black eye **	5	2.8%	27	12.1%
Sprains/sore body parts ***	18	10.2%	83	37.2%
Spray-related burns	1	0.6%	0	0%
Broken bones/fractures	0	0%	3	1.3%
Lacerations/slashes **	28	15.8%	14	6.3%
Imbedded glass/other object	0	0%	0	0%
Other burns	2	1.1%	2	0.9%
Chipped/lost teeth	1	0.6%	2	0.9%
Sexually violated **	0	0%	13	5.8%
Stab wounds ***	15	8.5%	2	0.9%
Gunshot wounds	0	0%	0	0%
Concussion/head injury	2	1.1%	0	0%
Internal bleeding/organ or artery damage	4	2.3%	3	1.3%
Loss of limb/body part	1	0.6%	0	0%
Loss of consciousness	2	1.1%	5	2.2%
Coma	0	0%	0	0%
Brain damage	0	0%	0	0%
Paralysis	0	0%	0	0%
Death	0	0%	0	0%
Other type of injury	0	0%	1	0.4%
No. of injuries received	267		396	
No. of victims who received injuries	177 (1.5 per person)		223 (1.8 per person)	
No. of missing cases	2		0	

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.7: Accused Injured by Sex of Accused

Did Accused Receive Injuries?***	Women Accused	Men Accused
Yes	48.1% (117)	7.4% (21)
No	51.9% (126)	92.6% (264)
Total	100% (243)	100% (285)

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.8 presents the results of the nature of the injuries received by the accused crosstabulated by the sex of the accused. The findings reveal that women accused are more likely to receive bruises, swelling, welts or redness (56% versus 33%) and sprains or sore body parts (24% versus 5%), while men accused are more likely to receive cuts, broken skin, scratches or bite marks (71% versus 41%) and spray-related burns (10% versus 1%). From these findings, we observe that the injuries received by men's victims mirror the injuries received by women accused, while the injuries received by women's victims mirror the injuries received by men accused. There were no differences between men and women in terms of the medical attention received.

The fifth measure of qualitative differences between men and women is who contacted the police for assistance with the violent event. Table 5.9 presents these results. The findings reveal that victims of men accused (who are largely women) are far more likely than victims of women accused (who are largely men) to contact the police for assistance (77% versus 42%).

Table 5.8: Type of Injury Received by Accused by Sex of Accused

Type of Injury Received by Accused	Women Accused		Men Accused	
Bloody or broken nose	8	6.8%	0	0%
Cuts/broken skin/scratches/bite marks *	48	41%	15	71.4%
Bruises/swelling/welts/redness	66	56.4%	7	33.3%
Loss of hair	4	3.4%	0	0%
Eye damage/black eye	7	6%	0	0%
Sprains/sore body parts *	28	23.9%	1	4.8%
Spray-related burns *	1	0.9%	2	9.5%
Broken bones/fractures	2	1.7%	1	4.8%
Lacerations/slashes	5	4.3%	1	4.8%
Imbedded glass/other object	0	0%	0	0%
Other burns	0	0%	0	0%
Chipped/lost teeth	0	0%	0	0%
Sexually violated	0	0%	0	0%
Stab wounds	1	0.9%	0	0%
Gunshot wounds	0	0%	0	0%
Concussion/head injury	0	0%	0	0%
Internal bleeding/organ or artery damage	0	0%	0	0%
Loss of limb/body part	0	0%	0	0%
Loss of consciousness	1	0.9%	0	0%
Coma	0	0%	0	0%
Brain damage	0	0%	0	0%
Paralysis	0	0%	0	0%
Death	0	0%	0	0%
Other type of injury	0	0%	0	0%
No. of injuries received	171		26	
No. of victims who received injuries	117 (1.5 per person)		21 (1.2 per person)	

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5.9: Who Contacted Police for Assistance by Sex of Accused

Who contacted police for assistance? ***	**Women Accused+**		**Men Accused**	
Victim	95	(42.4%)	220	(77.2%)
Accused	69	(30.8%)	13	(4.6%)
Both accused and victim	10	(4.5%)	1	(0.4%)
Witness or bystander	44	(19.6%)	47	(16.5%)
Police happened by/acting on information received	6	(2.7%)	4	(1.4%)
Total	224	(100%)	285	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There are 19 missing cases.

What is perhaps most interesting is that it was the *woman accused* who called the police in 35 percent of partner violence cases (versus only 5% of the men accused). If calls to the police are interpreted as a form of "help-seeking behaviour" on the part of someone in trouble, the findings of the present study suggest that in *more than one-third* of the cases involving a woman accused *she* was the one who perceived the need for police intervention. Indeed, when women accused called the police, their victims (who are largely men) were far more likely to use violence than victims of men (who are largely women) (90% versus 36%), especially major violence (45 % versus 0%). Moreover, victims of women who called the police are more likely to have been subsequently charged than victims of men accused who called the police (80% versus 43%). This would seem to indicate, then, that when a woman accused contacts the police, she is doing so because she is in a situation of real danger and in need of assistance. Nevertheless, she also ended up being charged with a criminal offence.

From the descriptive analysis, we observe that partner violence cases involving

women and men accused *are* qualitatively different. Men accused are using more serious violence tactics and more violence tactics per person than women accused. Moreover, women's victims (who are largely men) are far more likely to use violence than men's victims (who are largely women). When we examine the injuries received by women and men accused, we find that women accused are far more likely to receive injuries than men accused, and they are receiving more injuries per person. In terms of who contacted the police, the data reveal that victims of men accused (who are largely women) are far more likely to contact the police for assistance in partner violence cases. More importantly, women accused were far more likely than men accused to contact the police for assistance. Together, then, the findings presented here suggest that men's and women's partner violence is *asymmetrical* rather than symmetrical, as Conflict Tactics Scale research has previously suggested.

Given the qualitative differences between men's and women's partner violence, we might expect the criminal justice treatment of these cases to also differ. The following section will address this issue.

II. DIFFERENCES IN THE CJS TREATMENT OF WOMEN AND MEN ACCUSED

Descriptive Analysis

In order to determine whether there are differences in the criminal justice response to women and men charged with partner violence, four measures will be employed: the nature of charges laid against the accused; the frequency and nature of charges laid again the victim; case attrition; and sentencing patterns.

The first measure used to determine whether there are differences in the criminal justice treatment of women and men accused is the nature of the charges laid against the accused. Table 5.10 presents the findings of nature of charges crosstabulated by the sex of the accused. The results from Table 5.10 indicate that men accused are more likely than women accused to be charged with less serious offences such as level one and other assaults (67% versus 55%). In turn, women accused are more likely than men accused to be charged with level two and three assaults (44% versus 30%). This is likely due to the fact that women accused are more likely than men accused to hit with or throw something at their partners.

Table 5.10: Accused Nature of Charges by Sex of Accused

Accused Most Serious Charge **	**Women Accused**		**Men Accused**	
Non-violent charge	0	(0%)	0	(0%)
Level 1 and other assaults	133	(54.7%)	191	(67%)
Level 2 and 3 assaults	108	(44.4%)	86	(0.2%)
Sexual offences	0	(0%)	7	(2.5%)
Robbery	2	(0.8%)	0	(0%)
Attempt murder, Manslaughter or Murder	0	(0%)	1	(0.4%)
Total no. of accused charged	243	(100%)	285	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

The second measure used to determine whether there are differences in the criminal justice treatment of women and men accused of partner violence is the frequency and nature of charges laid against the victim. Table 5.11 presents the findings of victim charged

crosstabulated by the sex of the accused. The data reveal that women's victims (who are largely men) are almost six times more likely than men's victims (who are largely women) to be charged alongside their partners with a criminal offence (55% versus 10%).

Table 5.11: Victim Charged by Sex of Accused

Was victim(s) charged? ***	Women Accused		Men Accused	
Yes	134	(55.1%)	27	(9.5%)
No	109	(44.9%)	258	(90.5%)
Total	243	(100%)	285	(100%)

* p < .05; ** p < .01; *** p < .001

In terms of the nature of the charges laid, women's victims are more likely than men's victims to be charged with less serious offences such as non-violent offences or level one and other assaults (79% versus 62%) (see: Table 5.12). In turn, men's victims are almost two times as likely as women's victims to be charged with more serious offences such as level two and three assaults (39% versus 21%). This is likely due to the fact that victims of men accused (who are largely women) are more likely than victims of women accused (who are largely men) to hit with or throw something at their partner.

The third measure of differences in the criminal justice treatment of men and women accused is case attrition. The findings from Table 5.13 reveal that cases involving women accused are far more likely than cases involving men accused to result in attrition (83% versus 53%). In terms of the nature of attrition, cases involving women accused are twice as likely as cases involving men accused to receive a stay of proceedings (79% versus 39%).

Cases involving men accused, on the other hand, are more than three times as likely as cases involving women accused to receive an acquittal, discharge or dismissal (14% versus 4%).

Table 5.12: Victim Nature of Charges by Sex of Accused

Victim Most Serious Charge ***	**Women Accused**		**Men Accused±**	
Non-violent charge	1	(0.7%)	5	(19.2%)
Level 1 and other assaults	105	(78.4%)	11	(42.3%)
Level 2 and 3 assaults	28	(20.9%)	10	(38.5%)
Sexual offences	0	(0%)	0	(0%)
Robbery	0	(0%)	0	(0%)
Attempt murder, Manslaughter or Murder	0	(0%)	0	(0%)
Total no. of victims charged	134	(100%)	26	(100%)

* $p < .05$; ** $p < .01$; *** $p < .001$

± There is 1 missing case.

The final measure of differences in the criminal justice treatment of women and men accused is sentencing. Table 5.13 presents the results of sentences crosstabulated by the sex of the accused. Of the cases proceeding to the sentencing stage, men accused are more than three times as likely as women accused to receive a sentence of incarceration (43% versus 13%). Women accused, on the other hand, are 2.5 times as likely as men accused to receive more lenient sentences such as an absolute and conditional discharge, fine, community service work or restitution (35% versus 14%).

Table 5.13: Accused Most Serious Outcome by Sex of Accused

Accused Most Serious Outcome ***	**Women Accused+**		**Men Accused±**	
Acquitted, Discharged or Dismissed	10	(4.1%)	38	(13.5%)
Stay of Proceedings	192	(79.3%)	110	(39.1%)
ATTRITION	**202**	**(83.4%)**	**148**	**(52.7%)**
PROCEED TO SENTENCE	**40**	**(16.6%)**	**133**	**(47.3%)**
Absolute and Conditional Discharge, Fine, CSW or Restitution	14	(35%)	18	(13.5%)
Suspended Sentence plus Probation	21	(52.5%)	58	(43.6%)
Incarceration	5	(12.5%)	57	(42.9%)

* $p < .05$; ** $p < .01$; *** $p < .001$

+ There is 1 missing case.
± There are 4 missing cases.

An examination of the four measures reveals that partner violence cases involving women accused are, indeed, treated differently than partner violence cases involving men accused by the criminal justice system. While women accused are slightly more likely than men accused to be charged with more serious offences (i.e., level 2 and 3 assaults), their victims (who are predominantly male) are significantly more likely than victims of men accused (who are predominantly women) to be subsequently charged with a criminal offence. Similar to the nature of charges laid against the accused, men's victims are more likely than women's victims to be charged with more serious offences (i.e., level 2 and 3 assaults). In terms of the processing of men's and women's partner violence cases, however, cases

involving men accused are far less likely than cases involving women accused to result in attrition and, consequently, are more likely to proceed to the sentencing stage. Finally, the findings show that cases involving men accused are significantly more likely than cases involving women accused to receive sentences of incarceration. Women accused, on the other hand, are more likely than men accused to receive more lenient sentences such as an absolute or conditional discharges, fine, community service work and/or restitution.

CONCLUDING REMARKS

One consequence of the zero-tolerance policy was an increase in the number of women charged with partner violence offences. The data from the present study revealed a significant increase in the number of women charged with partner violence offences after the implementation of the zero-tolerance policy in 1993: whereas partner violence represented only 23 percent of women's charges for violent crime in 1991, by 1995 they represented 58 percent of women's violent crime charges. The findings from the present study, therefore, raise questions about the impact of the zero-tolerance policy on women. Is the increase in the number of women charged with partner violence offences evidence that the criminal justice system is working more fairly? In other words, is it simply the case that women – as "men's equals in violence" – are now being charged alongside men for their violent behaviour? Or, is the dramatic increase in the proportion of women being charged for partner violence evidence of a "net-widening" effect of the zero-tolerance policy, whereby more women are being brought into the criminal justice system under a lower standard for reasonable and probable grounds?

One way of determining whether the increase in the number of women charged with partner violence offences is the result of the effectiveness of the zero-tolerance policy is to examine whether there are qualitative differences between men's and women's partner violence events. The descriptive analysis in the present study found that partner violence cases involving women accused are qualitatively different from partner violence cases involving men accused. For example, men accused were almost twice as likely as women accused to push, shove, grab, elbow, pull, shake or wrestle. When combined with tactics like sitting on or restraining, slamming body or head into something and strangling or choking, the picture which emerges is one of men using their physical strength or force to overpower their female partners. On the other hand, women accused are almost six times more likely to pinch, bite, scratch or poke eyes. They are also more likely to hit with or throw something and to stab or slash. That women resort to the use of objects or weapons during the course of a violent event could be taken as evidence of self-defensive strategies in response to an aggressive partner. This would add weight to the claims of feminist researchers (Dobash, Wilson & Daly 1992) that women's violence in intimate relationships often occurs in the course of defending themselves against their abusive partners.

Another significant result of the descriptive analysis is that women's victims (who are largely men) are far more likely than men's victims (who are largely women) to use violence against their partners. Added to this is the finding that women accused are far more likely than men accused to receive injuries as a result of partner violence. This latter finding is important given the failure on the part of Conflict Tactics Scale researchers to examine the outcome of partner violence in terms of the injuries received. Taken together, these findings

suggest that violence between men and women is not "mutual combat"; partner violence is *not* symmetrical, as Conflict Tactics Scale researchers have suggested.

One of the more concerning findings to emerge from the descriptive analysis is that in over one-third of the cases involving a woman accused, she was the one to call the police for assistance, yet, she also ended up being charged with a criminal offence. This suggests that policies like zero-tolerance, which transfer the discretion from the police to the Crown attorneys' office, can work against the interests of women who are in abusive relationships. Doubling-charging (whereby both partners end up being charged by police) occurred in 55 percent of the cases involving women accused and 10 percent of those involving men accused.

If women are not "men's equals in violence," then the increase in the number of women charged with partner violence offences following the zero-tolerance policy cannot be interpreted as evidence that the criminal justice system is now working more fairly or effectively. Rather, the findings from the present study suggest that this increase is the result of a net-widening effect of the zero-tolerance policy, whereby women are being brought into the criminal justice system for more minor incidents of partner violence. Indeed, the descriptive analysis found that partner violence cases involving women accused are far more likely to result in stays of proceedings than partner violence cases involving men accused (79% versus 39%). Stays of proceedings were even higher in those cases where double-charging occurred (88% versus 77%). In all likelihood, Crown attorneys are more inclined to stay charges in such cases on the ground of self-defense. Under the self-defense law, if there is evidence to show that an accused's use of force was 'reasonable' – they were

responding to the force used by an assailant – then he/she will not be held culpable (Comack 1993). As such, women accused may be more likely to receive a stay of proceedings if attorneys deem their actions to be in self-defense. Further, when women's cases do proceed to the sentencing stage, they are more likely to receive less serious dispositions such as an absolute or conditional discharge, fine, community service work and/or restitution (compared to men accused who are far more likely to receive sentences of incarceration). It seems, then, that the zero-tolerance policy has indeed had a net-widening effect; more women (including those who call the police for help) are being pulled into the criminal justice system only to have their cases subsequently stayed by the Crown.

Conclusion

In the last two decades, we have witnessed a major change in Canada in the criminal justice response to partner violence. While wife abuse was historically treated as a 'private matter' by the police and courts, changes in policies and practices have resulted in the transformation of domestic violence into a public issue meriting criminal justice intervention. Nevertheless, the criminalization of wife abuse has remained a highly controversial issue within the women's movement. While some feminists have favoured using the law to respond to women's concerns, others have been more skeptical about the potential of the criminal justice system to improve the lives of battered women.

One policy in particular which has generated considerable debate has been the zero-tolerance policy implemented by the Winnipeg Police Service in 1993. One consequence of the zero-tolerance policy was an increase in the number of men – and women – charged with partner violence offences following its implementation. While some have interpreted this increase as evidence of the effectiveness or equity of the zero-tolerance policy, others have argued that the policy has resulted in a "net-widening" effect. In light of these competing interpretations, the purpose of this thesis has been to examine the effect of the zero-tolerance policy on the criminal justice response to partner violence. In order to address this issue, three broad questions were posed:

1. *Are there differences between partner and non-partner violence in terms of their processing by the criminal justice system?*
2. *Are there differences in the processing and sentencing of partner violence cases*

before and after the implementation of the zero-tolerance policy?

3. *Are there differences in the processing and sentencing of women and men charged with partner violence?*

Partner versus Non-Partner Violence

With regard to the processing of partner versus non-partner violence cases by the criminal justice system, analysis of a sample of 470 men charged by the Winnipeg Police Service (61% partners versus 39% non-partners) over a five-year period found that partner violence cases had a significantly higher incidence of case attrition than non-partner violence cases (53% versus 39%). These findings are contrary to those of Ursel (1992b) which found the Family Violence Court to exhibit a lower incidence of case attrition than the General Court (36% versus 43%). Further analysis of the data found that partner violence was qualitatively different from non-partner violence, especially when the latter group was separated according to the social relationship between the accused and the complainant(s) (that is, into friends or acquaintances and strangers). While partner violence cases were found to involve more serious violence tactics, cases involving friends or acquaintances resulted in the most serious injuries to complainants. Nevertheless, the criminal justice response did not correspond to these qualitative differences, in that cases involving stranger violence were most likely to proceed to sentencing, despite the fact that they were the least serious in terms of violence tactics used and injuries incurred by victims.

To investigate this issue further, a series of logistic regressions were performed. The results indicated that partners had 74 percent higher odds of case attrition than the reference

category of non-partners. Controlling for other variables indicated that legal variables (specifically, previous contact with the police, seriousness of the charge and the number of charges laid) increased the odds of case attrition for partners compared to non-partners by 56 percent. Surprisingly, the less serious charges in comparison to the more serious charges decreased the odds of case attrition, although partner cases were still more likely to result in case attrition than cases involving non-partners.

While sometimes difficult to interpret, what these findings do tell us is that the *social relationship* between the accused and the complainant(s) – not just between partners and non-partners but also within the non-partner group between friends or acquaintances and strangers – is a key factor in the criminal justice processing of cases. As such, to the extent that partner violence cases are more likely to result in case attrition – *despite* the fact that they involve serious violence tactics and their victims are as likely to receive injuries as non-partner violence cases – leads one to question whether, in fact, the criminal justice system is treating domestic violence as a serious crime meriting serious consequences.

By comparing violence cases involving partners versus non-partners processed during the same time period and by examining the qualitative features of these cases (such as the nature of the violence tactics used and the injuries incurred), the present study has allowed us to go beyond the existing research. Nevertheless, it is limited in that no clear answers were provided as to 'why' these differences in processing occur. As such, further research which examines the criminal justice processing of cases based on the social relationship between the accused and the complainant is warranted.

Pre versus Post Zero-Tolerance

The second way of assessing the effect of the zero-tolerance policy on the criminal justice response to partner violence involved an examination of partner violence cases where charges were laid before and after the implementation of the policy on July 12, 1993. An analysis of a sample of 677 partner violence cases (339 before versus 338 after the zero-tolerance policy) found that – similar to the Family Violence Tracking Project (Ursel 2000) – partner violence cases where charges were laid after the zero-tolerance policy had a significantly higher incidence of attrition than partner violence cases where charges were laid before the policy (73% post versus 58% pre). This finding is significant given that the aim of the Family Violence Court was to reduce attrition levels for partner violence cases. It suggests that the zero-tolerance policy has inhibited the court's ability to realize this goal, as it has brought more cases into the criminal justice system, the vast majority of which result in attrition.

An examination of the partner violence cases proceeding to sentencing revealed *no* differences in the sentencing practices before and after the zero-tolerance policy. This finding was especially important given Ursel's (1996) finding of a dramatic change in the sentencing patterns (with probation becoming the most frequent sentence, followed by incarceration) four years after the implementation of the Family Violence Court in 1990 compared to four years prior to the Family Violence Court. Moreover, an examination of the nature of charges laid against partners revealed *no* differences before and after the zero-tolerance policy. Taken together, these findings suggest that the zero-tolerance policy has had virtually *no effect* on the sentencing practices in partner violence cases. Where the zero-

tolerance policy has had an impact, however, is on Aboriginal men. The present study found that before the zero-tolerance policy, Caucasian men were more likely than Aboriginal men to be charged with a partner violence offence. After the policy, however, Aboriginal men were more likely to be charged. Indeed, the results of the logistic regressions indicate that social variables like race increased the differences in case attrition before and after the zero-tolerance policy. These findings support Snider's (1998) argument about the net-widening effect of the zero-tolerance policy, especially on Aboriginal men.

An examination of the data revealed a slight increase in the frequency of charges laid against victims after the zero-tolerance policy (34% post versus 27% pre). Thus, while double-charging was as an issue before the zero-tolerance policy, it became more of one after the policy was implemented. This finding is important given the concerns raised about the re-victimizing effect of the zero-tolerance policy, whereby victims of domestic violence are being charged with a criminal offence alongside their partners.

One of the benefits of the present study has been the ability to examine the specific features involved in partner violence events (for example, in terms of the nature of the violence used and the injuries incurred by participants). A descriptive analysis of partner violence cases occurring pre and post zero-tolerance revealed that while there are some qualitative differences between cases occurring before and after the policy was implemented, these differences are small. This finding is especially noteworthy in light of the results with regard to the processing and sentencing of partner violence cases. In other words, while those cases which proceeded to sentencing received virtually the same distribution of dispositions before and after the policy, the level of attrition – which was

high prior to the implementation of zero-tolerance (at 58%) – rose even higher once the policy is in place (to 73%).

In combination, these findings suggest that the zero-tolerance policy has inhibited the ability of the Family Violence Court to realize its objectives (such as reducing case attrition). They also lend support to the argument that zero-tolerance has had a net-widening effect. Clearly, more individuals are being brought into the criminal justice system on partner violence charges as a result of the policy. Yet, more of those charges are being disposed of without proceeding to sentence. The differential impact that zero-tolerance appears to be having on Aboriginal men and the continuing concerns with the issue of double-charging are areas which require further investigation.

Women versus Men

One consequence of the zero-tolerance policy was an increase in the number of women charged with partner violence offences. To date, there has been little in the way of a gender analysis of the impact of the zero-tolerance policy. This issue was examined using a sample of 501 cases of women and men charged by the Winnipeg Police Service with partner violence offences over a five-year period. The descriptive analysis indicated that partner violence cases involving women and men accused are *qualitatively different*: men accused are using more serious violence tactics and more violence tactics per person than women accused; women's victims (who are largely men) are far more likely to use violence than men's victims (who are largely women); women accused are far more likely to receive injuries than men accused and they are receiving more injuries per person; victims of men

accused (who are largely women) are far more likely to contact the police for assistance in partner violence cases; and women accused were far more likely than men accused to contact the police for assistance. Taken together, these findings suggest – contrary to the findings of Conflict Tactics Scale research – that men's and women's partner violence is *asymmetrical.*

An examination of the criminal justice treatment of women charged with partner violence found that these cases are, indeed. treated differently (more leniently) than partner violence cases involving men accused. These findings correspond to the nature of partner violent events. Specifically, partner violence cases involving women accused (which were revealed to be less serious) were far more likely to result in attrition than partner violence cases involving men accused (which were found to be more serious). Moreover, partner violence cases involving men accused were far more likely to receive the more serious sentence of incarceration than those cases involving women accused.

The findings of the descriptive analysis raise concerns about the gendered impact of the zero-tolerance policy. Given that women are not "men's equals in violence," then the increase in the number of women charged with partner violence offences after the policy cannot be interpreted as evidence that the criminal justice system is working more effectively. Indeed, the finding that in over one-third of the cases involving a woman accused, she was the one to call the police. yet, she also ended up being charged with a criminal offence suggests that the zero-tolerance policy is working against the interests of women who are in abusive relationships. It would appear, therefore, that under zero-tolerance, more women (including those who call on the police for help) are being pulled

into the criminal justice system for more minor incidents of partner violence, only to have their cases subsequently stayed, dismissed or discharged by the Crown. Clearly, further research which concentrates on the effects of policies like zero-tolerance for women (especially as accused) is warranted.

Implications

What implications does the present study have for the criminal justice system's response to partner violence? Evidently, the criminal justice response to partner violence is a highly complex and controversial issue. As Ursel (1998b) cautions, police response must not be used as short hand for everything that is wrong with the criminal justice system. Instead, she (1998b) argues that the question that should be addressed is whether it is possible to provide a responsible safety/crisis intervention without re-victimizing the victim. The answer, she suggests, lies not within the police department alone, but "within the web of intervening and interacting agencies such as criminal justice and social services systems" (1998: 74). At the same time, however, Currie (1998: 49) makes an important point: "In our haste to punish violent offenders, we have mistaken the need for policing and legal redress as the solution to, rather than symptom of, living in a violent society."

The focus of the present study has been on one particular aspect of the criminal justice response to domestic violence. It has not, for example, considered issues such as the enforcement of restraining orders or the priorizing of 911 calls to police. Nevertheless, while the focus has been limited, the findings do raise serious questions about the merits of using a zero-tolerance policy for responding to partner violence. Carol Smart (1989) uses

the concept of "juridogenesis" to refer to the phenomenon whereby efforts to remedy a particular social problem have the adverse effect of making conditions worse. In this respect, while the zero-tolerance policy may have been implemented with the best of intentions, it has also been shown to have produced barriers which limit the potential to effectively respond to the problem of domestic violence. Indeed, as noted in Chapter One, both Justice Schulman and various women's groups have expressed concerns that the increased charging of women under the zero-tolerance policy might lead few women to report to the police for fear of being charged themselves. In the same vein, Snider (1995) maintains that strategies which use criminal law and the criminal justice system tend to have a boomerang effect for women. Criminalization, she argues, is more about controlling groups who are vulnerable on the basis of their race, class, gender or ethnicity than it is about enhancing women's safety or eliminating male violence. Snider (1998) also points out that criminalization has the adverse effect of empowering criminal justice officials, rather than the women in whose name it is advocated. According to Snider (1998: 147), by appropriating conflicts, criminal justice intervention effectively removes them "from the aegis of those parties responsible, ultimately, for resolving them in a meaningful way." Snider (1998) concedes, however, that criminalization does two things well. On the one hand, incapacitation by arrest or incarceration has the temporary effect of stopping the violence, which is the primary reason why women call the police. On the other hand, criminalization has an important symbolic function: denunciation through criminal law sends a strong message that violence against women is unacceptable. Nevertheless, Snider (1995) argues that by focusing our efforts on punishment and social control, political and

theoretical attention is directed away from strategies which are potentially more meaningful and empowering for women such as preventative community-based education for male and female children and securing funding for victim/survivor services and offender restoration.

At the very least, these arguments - in conjunction with the findings from the present study - highlight the importance of engaging in discussions about alternative strategies for responding to partner violence cases that may prove to be beneficial to women and men; strategies which do not involve removing the discretion of the police or result in a net-widening of marginalized groups. Ursel suggests that those who are critical of criminal justice intervention in family violence matters advocate that we "abandon criminalization of family violence" (Ursel 2001: 3) or that those who are critical of zero-tolerance are calling for "reinstating past practices of police discretion" (Ursel 2001: 18). This is not the position taken in the present thesis. Domestic violence is a serious matter deserving of specific attention and resources. However, this does not necessarily mean that criminalization is always the best route for responding to partner violence. Indeed, the present study has found that there are problems with a zero-tolerance approach toward partner violence. For instance, zero-tolerance has resulted in significant increases in the workload of police and Crown attorneys and a corresponding taxing of resources which, more often than not, results in attrition. This means that individuals are less likely to get access to help at a time in their lives when they most need it. One recommendation proposed in the Schulman Report (Schulman 1997) is the implementation of a crisis intervention unit which would consist of police officers working in tandem with social workers to develop intervention and support initiatives on high-risk domestic violence cases. This

recommendation is currently being run as a pilot project by the Winnipeg Police Service. Such an approach has the potential to ensure individuals' physical safety and to connect them to resources in their community – without overextending the reach of the criminal justice system into their lives.

The criminal justice response to domestic violence is not static; neither is the criminal justice system the only site where solutions to the problem of domestic violence are to be found. Hopefully, the present study has contributed to the ongoing discussion of ways in which to end the violence.

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Appendix A

Severity Of Charge Scale[1]

1. Non-Violent/Level 1/Other Assaults

- Unlawfully enter dwelling-house
- Forcible entry
- Break and enter
- Wear disguise with intent
- Theft under
- Possession of goods obtained by crime
- Carry concealed weapon
- Possession of weapon dangerous to public peace
- Possession of prohibited or restricted weapon
- Point firearm
- Use firearm in commission of indictable offence
- Cause disturbance
- Mischief
- Rescue or permit escape from lawful custody
- Obstruct police/peace officer
- Obstructing justice
- Breach of recognizance
- Breach of Family Maintenance Act/Non-molestation order
- Failure to comply
- Disobey subpoena
- Contempt of court
- Failure to comply as a witness
- Breach of Taxi Cab Act
- Open liquor/Breach LCA
- Personation
- Cruelty to animals
- Extortion
- Drive while suspended
- Drive impaired
- Drive imprudently
- Assault (level 1)
- Assault police/peace officer
- Assault - resist arrest
- Utter threats
- Criminal harassment
- Dangerous operation of a motor vehicle

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[1] The Severity of Charge Scale was reviewed and accepted by Crown Attorney Tim Owens of the Family Violence unit of the Crown Prosecutors' office, Department of Justice, Manitoba.

- Failure to stop at scene of accident (hit and run)

2. Level 2/Level 3 assaults

- Assault with a weapon/Assault cause bodily harm (Level 2)
- Aggravated assault (Level 3)
- Dangerous operation of a motor vehicle cause bodily harm
- Forcible confinement/abduction/kidnap
- Discharge firearm with intent
- Choking to overcome resistance

3. Sexual Offences

- Sexual assault (Level 1)
- Sexual assault with a weapon/threats to a third party/cause bodily harm (Level 2)
- Aggravated sexual assault (Level 3)
- Other sexual offences

4. Robbery

- Robbery
- Attempt robbery

5. Attempt Murder/Manslaughter/Murder

- Attempt murder
- Accessory after the fact
- Manslaughter
- Murder

Appendix B

Severity Of Violence Scale[2]

1. Minor Violence

- Sit on/restrain otherwise
- Blind-fold
- Push/shove/grab/elbow/pull/shake/wrestle
- Property damage/destruction
- Scratch/pinch/poke eye
- Pull/cut hair
- Twist arm/wrist
- Slap (face and body)
- Spray (with something)
- Force to remove clothing
- Expose one's self

2. Moderate Violence

- Sexual touching/forced kissing
- Shave pubic hair
- Urinate/rub semen on
- Tattoo body
- Bite
- Punch (once)
- Utter threats/threats with weapon
- Hit with/throw object
- Head-but
- Shove fingers down throat
- Sick dog on victim
- Burn

3. Major Violence

- Slam body/head into something
- Kick/knee
- Choke/strangle
- Carve into body
- Pass virus (i.e. chlamydia)
- Beat (repeat punching)
- Force to perform sexual acts
- Sexual penetration/rape
- Stab/slash
- Shoot

---

[2] The Severity of Violence Scale was adapted from the Severity of Violence Against Women Scales (SVAWS) developed by Linda L. Marshall (1992).

Appendix C

Severity Of Injuries Scale

1. Minor Injuries

- Cuts/broken skin/scratches/bite marks
- Bruises/swelling/welts/redness
- Black eye/eye damage
- Sprains/soreness
- Loss of hair
- Spray-related burns

2. Moderate Injuries

- Broken bones/fractures
- Broken teeth
- Imbedded glass/object
- Burns
- Sexual violation

3. Major Injuries

- Gunshot wound
- Stab wound
- Slashes/lacerations
- Concussion
- Head injury
- Loss of consciousness
- Internal bleeding/organ damage
- Loss of limb/body part
- Coma
- Brain damage
- Paralysis
- Death

Appendix D

Severity Of Disposition Scale[3]

1. **Acquittal/Discharge/Dismissal** (includes Dismissed for Want of Prosecution)

2. **Stay Of Proceedings** (may include conditions such as domestic violence counseling or a peace bond)

3. **Absolute/Conditional Discharge/Fine/CSW/Restitution** (includes conditional discharge in combination with probation and/or conditions such as community service work and includes fine or community service work or restitution alone)

4. **Suspended Sentence Plus Probation** (includes suspended in combination with probation and may include conditions such as community service work, restitution and fine)

5. **Incarceration** (includes a provincial or federal sentence of incarceration in combination with conditions; may also include time in custody)

[3] The Severity of Disposition Scale was reviewed and accepted by Crown Attorney Tim Owens of the Family Violence unit of the Crown Prosecutors' office, Department of Justice, Manitoba.

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Recipes for the Imagination:
An Architectural Reading of F.T. Marinetti's
La cucina futurista

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A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements of the degree of Master of Architecture.

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Abstract

This thesis is a reflection on Filippo Tommaso Marinetti's (1876-1944) book *La cucina futurista* which was published in 1932. The text will provide the setting for an interpretation and a discussion of the possibility for finding a way of addressing and creating architecture today that strives to initiate creative, imaginative, poetic, and playful attitudes – yet attitudes that are always ethical. Marinetti's book offered a resistive project that was to breathe new life into the creative realm. With help from the text, this thesis will ponder the notion of architecture today as a place of invitation in which humans may gather and share vital and emotive dialogues about themselves and their existence. Reading Marinetti's text, we may conclude with a possible strategy of resistance for architecture that can be, as its Futurist predecessor once was, critical of its present limitations.

Résumé

Cette these est une reflexion sur le livre de Filipo Tommaso Marinetti (1876-1944), La Cucina Futurista, publie en 1932. Ce texte servira de cadre a une interpretation et a une discussion de la possibilite de trouver une facon de penser et de creer une architecture qui serait a la fois creative, imaginative, poetique et ludique, tout en restant eminemment ethique. Le livre de Marinetti offrit une position de resistance qui allait insuffler une nouvelle vie au domaine creatif de l'epoque. A l'aide du texte, cette these tentera de valider la possibilite que l'architecture actuelle soit un lieu invitant les etres humains a se rencontrer et partager des dialogues emotifs et vitaux concernant leur vie et leur existence. En lisant le texte de Marinetti, on pourra en arriver a une strategie de resistance pour l'architecture qui pourra etre, comme le fut son predecesseur Futuriste, critique vis-a-vis ses limitations actuelles.

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INTRODUCTION

This thesis takes an interpretive look at *La cucina futurista* (1932) – an intriguing artifact from Futurism, written by the Futurist poet Filippo Tommaso Marinetti.[1] This interpretation will provide the framework for a discussion of the ideas in this text (which is essentially a text on making), to relate them to the making of architecture, and to argue for their relevance to a practice of architecture that is conducive to better being. Furthermore, this thesis uncovers the possible contributions that *La cucina futurista* might have for architects today such as an appreciation of the relevance of an ethical, creative, and poetic imagination in the theory and practice of architecture. In a time of crisis – during the 20's and 30's – Marinetti strongly advocated for a return to the imagination, stressing the relevant place of imagination for creating wonder, joy, and happiness in our lives. If architecture is to be rescued from its current crisis it must delve into the imagination as Marinetti had advocated many years ago. At once on reading this book one realizes that this densely poetic text, written by a poet, brings a new and extraordinarily unique perspective on what it means to live, to make food, and to eat.

As a Futurist document, *La cucina futurista* has been rather neglected in discussions about Futurism by the experts.[2] This book is in fact Marinetti's summary of Italian Futurism, comprising and employing the many innovations of Futurism and embodying the Futurist way of being. Marinetti uses a seemingly unconventional discussion of making food as a

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[1], F.T. Marinetti, *La cucina futurista (The Futurist Cookbook)*. Trans. Suzanne Brill. San Francisco: Bedford Arts Pub., 1989.

[2] *La cucina futurista* is rarely commented on in the seminal English language books on Futurism such as: M.W. Martin's *Futurist Art and Theory 1909-1915* (Oxford: Clarendon Press, 1968), Angelo Bozzolla and Caroline Tisdall's *Futurism* (London: Thames and Hudson Ltd., 1973), Michael Kirby's *Futurist Performance* (New York: E.P. Dutton & Co. Inc., 1971), Christiana J. Taylor's *Futurism, Politics, Painting*

metaphor for creating art *and architecture*. A palate of food becomes a palate for creating art in the way of gathering, assembling, cooking, presenting, and eating "food." This text, like all Futurist works, poses essential questions about the creation and role of art in this century.

La cucina futurista is a fascinating story filled with rich imagery of elaborate dinners – orchestrated banquets that are more like staged food theatre, including recipes that seem to push the imagination to its limits as one contemplates his fate upon eating them. The text is written poetically and creatively – it shows off Marinetti's personality, as well as his unique style in its literary manner and presentations of these dinners, banquets, recipes, including a bizarre collage of different newspaper reports, personal letters, weird science, and historical hoaxes.[3] That creative optimism and faith in imagination is desperately needed today in light of a post-modern and deconstructivist nihilism that only takes apart and parodies and that is cautious and suspicious of any creative originality.[4] In that light, *La cucina futurist* stands as a striking contrast today.

There exists a common ground between Marinetti's artistic concerns of writing *La cucina futurista* in a climate of artistic and economic crisis and the contemporary crisis of architecture. This modern crisis became increasingly apparent as modern scientific formulations, rules, and theories have become entrenched in the practice of architecture. Rational objectification, functionalization, and stylization have falsely stood as the

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and Performance (Michigan: UMI Research Press,1979), and Rosa Trillo Clough's *Futurism* (New York: Philosophical Library Inc., 1961).

[3] The text is both uniquely of Marinetti's style and also very different to anything comparable to his past work. *La cucina futurista* is not a manifesto, a novel, a short story, a poem, a speech. All these literary genres, which Marinetti regularly used, are cooked together to compose the flesh of *La cucina futurista's* literary structure.

[4] Richard Kearney finds that contemporary philosophers are not concerned with the imagination. "The very opposite is the case," he says, as modern philosophers are only keen to "dismantle the very notion of imagination." *The Wake of Imagination* (Minneapolis: University of Minnesota Press, 1988). 251.

only relevant purposes and meanings of creating architecture.[5] This standpoint marked a departure from the traditional paradigms of architecture that took ideas of building and architecture as moments where human poetic, mythical, narrative, and existential intentions were to be pondered and related to the human other. The primacy of the poetic sense of man, as a way in which humans have come to gather and share themselves – much like the dinner table around which humans continue to gather, to eat, speak, laugh, flirt, play and sometimes sleep – has been lost. Any dinner table serves not only the functional purpose of supporting dishes and elbows, more importantly it draws out a place where people are to gather and present themselves as they eat. Arguably, the dinner table is more architectural than many works of modern architecture.

Italian Futurism – the artistic movement pertaining to *La cucina futurista* – represents a unique moment in all modern art.[6] There was a desire by Marinetti and others[7] to create a new idiom of expression accountable to the twentieth century human being but with a critical rejection of any idea that called for a return to traditional ways of creating art – these past ways, they felt, could no longer deal with the facts of an ever technological future. Futurism is famous for its technological bent. The movement tried to incorporate technological advances, in fact, cleverly turning technology in on itself, seizing it artistically, and discovering and celebrating its irrationality. The movement attempted to conquer new technologies by setting down creative Futurist criteria for new technological products such as airplanes, photography, cinema,

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[5] Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge, Massachusetts: The MIT Press, 1983), 4.

[6] In this thesis, unless otherwise indicated, "Futurism" always refers to *Italian Futurism* and specifically Marinetti's own ideas of Futurism.

[7] *Others* is a reference to not only other Italian Futurists, but includes other artistic and philosophical tendencies such as, Cubism, Surrealism, Dada etc.

theatre, to *will* them into art.[8] The desire to impose *Art* on machines stressed Marinetti's view that, the human is firstly and forever an artist and that humanity itself is defined by its inherent insistence on art as the primary outlet from which to express, relate, situate itself the world.[9]

In some respects, many Futurists, including Marinetti, did perhaps overstep their faith in technology becoming enamoured by these new technologies. In this regard they were uncritical of technology and refused to see the detrimental effects that technologies would have when forced on humans and the environment. Nonetheless, it should be noted that Marinetti's technological interests were not only based on a general fascination with technology, rather, the interest was made a fetish – made more grotesque by the visible lack of technology in Italy.[10] I believe, that Marinetti was not interested in technology itself, rather only interested in exploring a poetic modern fantasy of technology for other technologically illiterate Italians.[11] In Futurism there was a difference between technology and machines. Machines were not technological instruments but objects of entertainment that exhibited alien forms of existence. The table machines, for instance, in *La cucina futurista* that revolved and sprayed perfume, and which accompanied the dances of waiters are a good example of Futurist machines as poetic tropes.[12] Similarly, the transforming stage machines of

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[8] In the text Marinetti makes references to Television. He has already seized this invention and laid a Futurist plan for its appropriation.

[9] Marinetti sought to transform life through art, and for "art to become a form of life." As a modern artist, the human being uses technology to create the bread for his existence, *Art*. See Günter Berghaus' *Futurism and Politics* (Oxford: Bergham Books, 1996), 47.

[10] Clough wrote "it would never have occurred to a New Yorker, for instance, to address to an American public an appeal extolling speed, machines and fast living. It was a cry of long repressed admiration for a spectacle that else where was taken for granted by millions of persons," *Futurism*, 15.

[11] Considering the rapid pace of technological development witnessed in Europe (but not Italy), Marinetti attempted to forge an Italian relationship to technology – not necessarily one of factory efficiency but rather one of artistic fantasy.

[12] Our conception of Machine is for more complex than Marinetti's. The airplane, so ubiquitous today, was a wondrous flying metaphor during Marinetti's age. The *Turk* -

Prampolini and Depero, and indeed all machines were to have an artistic imperative. As a Futurist artifact, *La cucina Futurista* is surprisingly sparse with the technological polemic of other Futurist texts.

Futurism, as an ideological position, is not perfect and it is not without its faults, presuppositions, misguided adventures and dubious political interactions. Marinetti did associate with certain people, political groups, and ideas (such as Fascism) that have stained his reputation and his artistic accomplishments. Accordingly, many commentators have unfairly judged, wholesale, this heterogeneous and diverse poetic and artistic movement.[13] They forget the various innovations to the different arts that many Futurists made, which even today seem wondrous, creative, and imaginative given their time and place, not withstanding their clear influence on other artistic movements such as Surrealism and Dada.[14] These Futurist artifacts, are worth re-examination, another look under a different light, in the hope that they may reveal inspirations for the architects and artists of today.

We may frame the context of Futurism to grasp how and why Marinetti decided to undertake a search for a way past what was initially a crisis in poetry, but which became a larger existential crisis punctuated by artistic mediocrity and imaginative paralysis in Italy and Europe.

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a mysterious and magical, chess-game playing mechanical automaton- represents a parallel example of the Futurist definition of 'Machine.' And perhaps, the term 'machine' was not restricted to mechanical objects, but non machines like clothing, musical instruments, and fireworks.

[13] Futurism was not a monolithic artistic block but rather an umbrella for all sorts of artistic and philosophical tendencies. In its ranks were Marxists, Nationalists, Surrealists, Pacifists, architects, and non-Italians. Avant-gardists not directly involved in Futurism were also considered Futurist. Indeed, 'Futurist' generally meant, avant-gardist.

[14] Michael Kirby stresses that Futurism contributed in a number of ways to the development of Dada and Surrealism. He supports his claim by showing the historical development of modern theatre, and showing the influence of Futurism on the work of

Marinetti's Futurism can be viewed as a remedy or a figurative recipe whose creative spirit can still be drawn upon to offer a different proposal for art and life and from which we can devise an architecture of critical resistance to formalization.

Biography of Marinetti

Filippo Tommaso Marinetti was born in Alexandria, Egypt in 1876 to wealthy Italian parents. His father, Enrico Marinetti, had amassed a fortune practicing as a lawyer in Egypt. Marinetti received a French education in Egypt at St. Francis Xavier College – a Jesuit lycee. He was allowed to complete his education despite being expelled for allegedly bringing a book by Emile Zola to school. Marinetti, then eighteen years old, was then sent to the Sorbonne to prepare for a bacculaureat. In Paris he spent most of his time frequenting cafes and cabarets, gaining access to the prestigious salons of literary society, and becoming aquainted with the latest of French trends in art and literature. In 1894 Marinetti received his *Diplome de Bachelier de L'Enseignement Secondaire Classique* upon which he enrolled at the University of Pavia, then went on to Genoa to study Law according to his father's wishes. He graduated with a Doctorate in Law in 1899.

During his education, both in France and Italy, Marinetti was rather uninterested in his schooling and derived more satisfaction from pursuing his true calling: poetry. He was never far away from his friends in Paris, and commuted from Italy to France regularly to keep well in touch with the Parisian artistic scene.

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non-realistic playwrights like Pirandello and Thornton Wilder, and to the development of the Theatre of the Absurd. *Futurist Performance*, 6.

From the years 1900-1909 Marinetti poured himself into writing poetry, and was also a cultural critic and a playwright. In 1905 he launched *Poesia*, a literary journal, which translated and published avant-garde French and Italian poetry. *Poesia* had the dual purpose of offering young Italian poets a place to voice their opinions, and introducing the Italian public to the international poetry scene. In February of 1909 Marinetti published in the French journal *Le Figaro*, *The Founding and Manifesto of Futurism*. The manifesto largely defined the Futurist program in which Marinetti became fully immersed until his fatal heart attack in 1944.[15]

After founding Futurism, he earned the name "The Caffeine of Europe," as he traveled tirelessly from city to city.[16] Marinetti's life was, it seems, dedicated to energetic confrontation and riotous fervour. He lived his life with a unique intensity, he held international exhibitions of Futurist art by day, and presented poetry readings, called *Serate*, at night which sometimes turned into uncontrolled riots in the streets. In his manifesto he writes: "we intend to sing of the love of danger, the habit of energy and fearlessness."[17] Then continues: "courage, audacity, and revolt will be essential elements of our poetry."[18] He was well known for his violent style of writing and his love of commotion and quarrel.

With his tendency for violence, it would seem difficult today to value Marinetti and to find inspiration in his writings. It would also seem perverse to regard this bellicose figure as someone from whom we should distill an ethical, poetic, and imaginative concoction to help us live better, more joyful, and more fulfilling lives. We certainly can not afford to

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[15] *The Founding and Manifesto of Futurism 1909*. Umbro Apollonio, *Futurist Manifesto* (London: Thames and Hudson Ltd., 1973), 19.
[16] Angelo Bozzolla and Caroline Tisdall, 8.
[17] *The Founding and Manifesto of Futurism 1909*, 19.
[18] Ibid., 19.

romanticize violence and war. We possess unprecedented powers that, with a single push of a button, can annihilate us and our planet. And after two world wars and countless other conflicts that have resulted in mass death and destruction, Marinetti's words and his philosophy of life may seem suicidal if not insane. We cannot cry out "We glorify war - the world's only hygiene," as Marinetti did in 1909.

The Complexity of Interpretation

To take Marinetti's life as something to emulate and to live our lives as he once did would certainly be a mistake. Paradoxically, it would also be counter to Marinetti's insistence on personal creativity and originality. On the other hand, to ignore Marinetti and his Futurism would be a greater mistake because Futurism did open up positive new ways of expression that other artistic movements continue to pursue today. Those who decline the implications of Futurism, preferring to locate exclusively the origins of modern art in some other moment in the past, do not give Futurism its proper credit. There is a basic issue of appropriation – what can we "make our own" out of Marinetti and his Futurism?

I chose *La cucina futurista* because I believe it provides a good window from which we can look at and evaluate Futurism so that it may bear positively upon our lives. It is important not to forget to place Futurism within its proper historical setting. We are able today to look back at Marinetti and Futurism and perhaps imagine and understand them first before we begin to cast judgments, and to draw conclusions. Interpreting and appropriating this and any Futurist text becomes a delicate matter. What can complicate the interpretation of Marinetti's work is his often overly polemical style, he was interested in drawing attention to issues of real importance that he felt were being neglected. In his outspokenness he was more interested in getting an immediate and mostly

agitated reaction from his listeners, this made any serious and genuine dialogue difficult. When reading Futurist texts a critical sifting of the text must occur in which the polemics are recognized and contextualized.

In the conclusion to *The Wake of Imagination* Richard Kearny illustrates the hermeneutic task we must take when we open a text for discussion. He explains that a hermeneutic reading would allow "repressed voices to speak out, neglected texts to get a hearing."[19] Futurism is a rather repressed topic, due in part to its involvement with Mussolini's Fascism – it was censured during the postwar years and even today. That connection with Fascism left it unpopular artistically and academically, and leaves many texts lost and untranslated.[20] The task Kearny points to is one that "reminds us that humanity has a duty, if it wishes to survive its threatened ending, to remember the past and to project a future."[21] He adds: "we cannot even begin to know what the post-modern present is unless we are first prepared to *imagine* what it has been and what it may become."[22] He stresses the importance of not abandoning "the imaginative quest for historical *depth*."[23] The interpretation must also recognize the importance of suspending the positing of reality, or bracketing, as described by the philosopher Edmund Husserl. I recognize *La cucina futurista* as a work of fiction, I do not read it literally or as a gag but as a poetic text on making that is relevant to the making of architecture.

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[19] Richard Kearney, *The Wake of Imagination*, 390.
[20] Michael Kirby tells the story (*Futurist Performance*, viii) of the first time he went to interview Fortunato Depero's widow, Rosetta. There, to his amazement, he found a cabinet "completely filled with stacks of Depero's notes and sketches. Nobody, not even his wife, had gone through them since his death." Kirby wonders how many other cabinets there might be, containing valuable information, but due to the stigma of Futurism they remain undocumented.
[21] Richard Kearney, *The Wake of Imagination*, 390.
[22] Ibid., 392.
[23] Ibid., 392.

There has to be a subtle middle path of vigilance when looking at Futurism that may not be as necessary when looking at other modern artistic movements. Its roots are tangled, they run in every direction – sometimes interweaving and fusing – and other times they are foreign and of another tree. Futurism was purposefully interdisciplinary and multidisciplinary, and for that reason it becomes a delicate matter when interpreting and appropriating the text. What then is Futurism?

Futurism

It is correct to say that Futurism was symptomatic of a general breakdown of values, rules, and conventions that had held firm from the earliest days of Western culture. By the nineteenth century Friedrich Nietzsche saw that with the waning of religion and the loss of man's connection with a transcendent realm of being - humanity was cast adrift in a world that no longer answered the needs of the spirit.[24]

It was to action, as Hannah Arendt points out, that the men of the nineteenth century would turn to in time of crisis. "In this predicament action, with its involvement and commitment, its being *engagée*, seemed to hold out the hope, not of solving any problems, but of making it possible to live with them without becoming, as Sartre once put it, a *salaud*, a hypocrite."[25] This turn to action created existentialism as "a primary escape from the perplexities of modern philosophy into the unquestioning

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[24] The loss of religion is a complex fact. William Barret writes: "Religion to medieval man was not so much a theological system as a solid psychological matrix surrounding the individual's life from birth to death, sanctifying and enclosing all its ordinary and extraordinary occasions in sacrament and ritual. The loss of the Church was the loss of a whole system of symbols, images, dogmas, and rites which had the psychological validity of immediate experience, and within which hitherto the whole psychic life of Western man had been safely contained." *Irrational Man* (New York: Anchor Books/Doubleday, 1958), 24.

[25] Hannah Arendt, *Between the Past and Future* (New York: Penguin Books USA Inc., 1993), 9.

commitment of action."[26] It was in action that artists, intellectuals, writers, and others "could find access to the public realm. . . in time of revolution,"[27] something Marinetti learned from others before him. Action is the basis in Futurism upon which ideas of change, emotion, sensory stimulation, and physical engagement were to find their footing.

In poetry, the Romanticism of the nineteenth century legitimized the concrete "cognitive drives of the body, to sense, emotion, passion,"[28] over formal knowledge, as existentialism did when it rebelled against philosophy. Marinetti, a graduate of law, turns to poetry rather than law to undergo his plan of change. He, as well as other Italian writers of the period, looked towards French models when they ventured to find a new idiom to express their poetic concerns. Marinetti was inspired by French poets like Stéphane Mallarmé and Paul Valéry who expressed their disgust with the artistic mediocrity of the nineteenth century imagination.

However, action did not exclude violence as a means to change an unsatisfying artistic situation.[29] The absurdity of a world no longer logically constructed revealed its brutality – poets entered the political realm and fused together their art and their politics.[30] It became

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[26] Ibid., 8.
[27] Ibid., 8.
[28] Kojin Karatani, *Architecture as Metaphor* (Cambridge: MIT Press, 1995), 23.
[29] In *The Futurist Moment*, Marjorie Perloff meticulously presents the ubiquitous call for violent action expressed by various disenfranchised groups such as artists, philosophers, and leftists. Violence was seen as a direct method for achieving change. Violence was not exclusive to the Futurists, rather it was an artistic expression wielded by all those interested in overcoming the crisis of art in the modern scientific age. Furthermore, within the Futurist movement violence was expressed in different ways, some like Aldo Palazzeschi - author of the *Manifesto against Pain* - did not even accepted violence as an instrument for change. (Chicago: University of Chicago Press, 1986), 29-38
[30] In French Symbolist literary circles the love of violence and destruction expressed a disgust for the modern bourgeois by engaging in the extraordinary, the gloriously immoral, and the adventurous. The real-life exploits of anarchists, assassins, and terrorists inspired artists and poets. Rimbaud, for instance, gave up poetry entirely,

increasingly clear that art was no longer able to stand up by itself and now needed justification, whether political, economic or cultural.

The artistic and political situations in Italy had not been so turbulent as they had been in France and Germany. For the most part Italy was untouched by modernity. In 1861 Italy became a modern nation of previously autonomously ruled states. The *Risorgimento* had consolidated an Italian state with its capital in Turin.[31] The *New* Italy was seen by many non-Piedmontese as simply an expansion of the Kingdom of Piedmont, and was far to qualify as a nation. With two percent of the population as voters it was hardly representative of the population in general – especially the poorer southern part of the peninsula. For such Italians the new state became personified only by the tax collector who collected to pay back the debt of forty years of fighting for this unified Italy. The massive debt was paid almost exclusively by taxation. Italians were the most heavily taxed people in Europe. The country was left with no economic growth prompting many southerners to leave Italy for America.

For Marinetti, the period from 1870-1915 represented a era of Italian history that was rife with economic and political failure. Successive Italian governments became enthralled with scandal and corruption and left many Italians, including Marinetti, to see only weakness in the country's lack of proper parliamentary representation, in its deep corruption, its impotent foreign policy, and its technological and educational retardation. The project of the *Risorgimento* never lived up to its promises of a unified, strong, colonial Italian state – something which haunted Italy into the 1940's. Futurism was initiated by Marinetti as a revolt against a decaying

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he left Europe to be a gun runner in Abyssinia. In the end he spoke of poetry as "one of my follies."

[31] For a detailed discussion of the *Risorgimento* see, Paul Ransome's *Antonio Gramsci* (Hertfordshire: Harvester Wheatsheaf, 1992), chapter 2; and Günter Berghaus' *Futurism and Politics* (Oxford: Bergham Books, 1996).

status quo that was becoming ever more estranged from modern life.[32] Marinetti saw that there needed to be a radical reassessment of the place and importance of *Art* in life – elevating the status of art and making *Life* as its subject. The task of Futurism was to use, artistically, the objects of modern life to define, re-imagine, and create the possibility of just what such a life can be like. *La cucina futurista* is a good illustration of this actuality, where human experiences like love and desire, sadness or depression, freedom and travel, become subjects for art.

Marinetti's Mission

During Marinetti's schooling and travels he became acquainted with many notable figures: the Symbolist poet Gustave Kahn, Sarah Bernhardt, Alfred Jarry, Guillaume Apollinaire, and Gabriele D'Annunzio. But, it was the philosophical works of Friedrich Nietzsche and Henri Bergson – which Marinetti had read from an early age – that outlined for him the mission of Futurism as a comprehensive project which was intended to bring change to an unsatisfying cultural atmosphere.[33]

Marinetti's disappointment with Italy's unchanging artistic tastes which were unable to speak about the present and the future lead him to believe that he could contribute to its overcoming, and that Italy's attitude to its past prevented its artists from exploring their own creative landscapes. This was no easy task in Italy. Whereas "a gentle murmur

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[32] How Marinetti saw Italy's artistic environment can be summed up in this speech given to an English audience in 1910: "When, oh when, will you rid yourselves of the lymphatic ideology of your deplorable Ruskin...with his morbid dreams of primitive rustic life, with his nostalgia for Homeric cheeses and legendary spinning-wheels, with his hatred of the machine, of steam and electricity, this mania for antique simplicity is like a man who in full maturity wants to sleep in his cot again and feed again at the breast of a decrepit old nurse in order to regain the thoughtless state of infancy." Quoted in Bozzolla and Tisdall, 123.

might instigate change or at least interest in Paris, the most amplified shouts would not carry far in Italy."[34] The heavy weight of Italian history which was visible throughout Italy's cities and landscapes was something Italians could not fully separate themselves from. Marinetti saw Italy as a giant museum[35] dedicated to preserving the past not for the service and sake of life, but for "the inquisitive tourist or pedantic micrologist."[36] Marinetti appropriated Nietzsche's concepts of the *Ubermensch* or the *Superman*, and *der Wille zur Macht* or *Will to Power* to gather the tools from which to forge a new outlook on the importance of creative action which he translated as Futurism into the Italian artistic, political, and social arenas in order to change the cultural situation.[37]

Marinetti saw this Italian servitude to the past as Nietzsche had in, *On the uses and disadvantages of history for life*.[38] In this essay Nietzsche outlines the detrimental effects of improper historicity, and points to three possible relationships one can assume towards history: the Monumental, Antiquarian, and Critical relations. The monumental relationship to history assumes the past as a great wondrous time, better than our own present.

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[33] Although these ideas did have a formative influence on Marinetti. I am merely giving a picture of Futurism with help from Marinetti's known philosophic readings. Futurism and Marinetti's philosophic ideas were his own.

[34] Bozzolla and Tisdall, 131.

[35] See Umbro Apollonio's *Futurist Manifesto*, Founding Manifesto, 22.

[36] See Bozzolla and Tisdall, 123, and Freidrich Nietzsche's *Untimely Meditations*, Trans. R.J. Hollingdale (Cambridge: Cambridge University Press, 1983), 68.

[37] Just before the beginning of this century Italian translations of Nietzsche became available, sparking off a Nietzsche craze. This craze was reflected in the manner in which Italian philosophical, cultural, and literary journals featured numerous essays on Nietzsche's work – testifying to the general popularity of the philosopher. Just how much Nietzsche's philosophy exploded in popularity is summarized by M.A. Stefani who writes: "At the end of the nineteenth century and the beginning of the twentieth century Nietzsche was in the first instance a curiosity item. He was regarded as an intellectual who had said some 'strange things' in a language so ultra-modern as to give us a taste of the things to come. He was hardly understood at the time. For European and, even more so, Italian culture, Nietzsche was still a part of the future. He was a phenomenon outside the norm, beyond his time, an anticipator of a new epoch." Quoted in Günter Berghaus *Futurism and Politics*, 24.

[38] Ibid., 57.

For instance, the Italians of the Renaissance were monumental about the Romans and Greeks of their past. The antiquarian relationship sets about preserving and reserving the past "for those who should come into existence after him."[39] This would be the museum mentality that "mummifies" life, and prevents new life from interacting with that of the past.[40] Lastly, Nietzsche's preferable relationship, the critical, is one that allows man to "if he is to live. . . break up and dissolve a part of the past."[41] This critical reading of history was seen by Nietzsche to be "in the service of life .... for the sake of life."[42]

Marinetti's critical relationship to Italy's past confronted the ideas of the past with the Futurist imagination, pitting them against each other. In *La cucina futurista* the recipes, the manner of eating, the preparation, and the setting of the meals are critical of Pelegrino Artusi's *La scienza in cucina e l'arte di mangier bene*, which at that time represented the quintessential gentile, bourgeois ideal of nineteenth century family cooking. Marinetti's critique questioned the idyllic pastoral images in Artusi's book as unsuited to modern living. He challenged Artusi's picture that presented the making of food (art) as "a Romantic, Rousseauan notion – as one of nourishing fare, gathering from the countryside and preparing at length with loving care."[43]

Marinetti's answer to Italy's historical and cultural crisis was to confront the past critically by reaching into the imagination, and to develop, creatively and poetically, a better life. Through an interpretation of the superman, Marinetti showed Italians that they were not so overwhelmed by their history that they could not develop the necessary

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[39] Ibid., 73.
[40] Ibid., 75.
[41] Ibid., 75.
[42] Ibid., 75-77.
[43] *La cucina futurista*, 7.

historical distance for a critical recollection and engagement. Nietzsche envisioned the superhuman as a person who, with his own skill and determination, could change his fortune by willing it so, who could create for himself what he wanted, and this figure would standout because of his creativity. But interpreting Marinetti's take on Nietzsche is complicated by Nietzsche's own ambiguities with regard to the superman. Nietzsche is at times so extreme that the superman becomes personified as the symbol of an SS officer. Indeed, it is not too difficult to see how easily Nazis 'misinterpreted' Nietzsche's concepts of the eugenic super-hero.

For Marinetti, the superman was not the demonic soldier, but the forward looking (and moving) *artist* who creates because he must. In *La cucina futurista* the superman is personified by the cook whose creative interventions with food alleviates the crisis at hand (of which more will be said in chapter I, *The Function of the Cook*). Both the superman and the cook were leaders. The cook was charged with making foods which were better suited to modern life. It was the cook's unique ability to present to others – with inviting edible constructions which momentarily captured their attentions – another point of view or alternative tastes of life that made him a superman to Marinetti.

Both, superman and cook, accomplished their goals by affirming their capacity to reach their goals, to saying YES; that is *Will to Power*. Nietzsche had recognized that power was something that classical civilizations had rested on and saw relations of power as a natural and basic part of all life. Power mingled in all the exploits of life – in seduction and in conquest. Nevertheless, one can argue for a different interpretation of power, not as a force of domination and subjugation of others and the world, but rather a power over oneself, exemplified by the "I can" of the artist. Such a willing over oneself becomes an ethical undertaking, that

moves the individual, the cook, and the architect into a preferable realm – that of creativity.[44]

Bergson's philosophy did to some extent complement and developed several aspects of Nietzsche's thought.[45] His ideas played a constructive role in the artistic formulations of Futurism and they are in evidence in many Futurist works like *La cucina futurista*.

Marinetti must have sympathized with Bergson's ideas on time, change, and duration. Like Bergson, Marinetti also felt that "for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly."[46] Marinetti's critique of Italian culture was its lack of change, presented in *La cucina futurista* as the blind Italian servitude to Pastasciutta. Italian food (art) was frozen and unable to mature – it needed to grow, to be recreated and recreated endlessly, to accommodate the tastes of those now living as well as those of the past. Marinetti's argument for change was linked to life, to a better life, which grants growth, imagination and creativity. Marinetti constantly stressed that we could in no way return or continue to live a past, because that past moment was now something else – forever changing as "a new

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[44] See Fragments 809 and 829 in Nietzsche's *Will to Power*, also Gianni Vattimo's *The Adventure of Difference* (Baltimore: Johns Hopkins University Press), and Joan Stambaugh, *The Other Nietzsche* (Albany: State University of New York Press, 1994), 19.

[45] Bergson was capable of bringing philosophy out of the mechanistic determinism of Herbert Spencer by illustrating the limited scope of science. He stressed that the *élan vital* could not be accounted for with mechanistic and determinist methods but could only be known in immediate intuition.
His philosophizing focused on the concept of the present, and Merleau-Ponty credited him to drawing "for the first time . . . attention to what was peculiar to the very being and articulation of the present." *Signs* (Evanston: Northwestern University Press, 1964), 191. Bergson, like Nietzsche, wrote in an manner that was accessible enough to attract to philosophy large audiences. His style was friendly, personal, mystical, and contrary to the philosophized technical jargon of his predecessors.

[46] Ibid., 7.

accumulation [of the past] arises at every step."[47] However, this did not imply a rejection of the past. The Futurist cook uses the same ingredients as his predecessors, but combines and shapes them in a different way to express a present personal outlook. The present is then for Bergson and Marinetti an important weighty moment, it "lights up the zone of potentialities that surrounds the act. It fills the interval between what is done and what might be done."[48] The present is that theatre of imagination, where every possibility of action is imagined and tested, before the irreversible choice is made, it is also where we encounter our free will.

Bergson argued that the human inclination to materialism had led us to think in terms of space but time is as fundamental as space, and it is time undoubtedly, Bergson says, that holds the essence of life and possibly of all reality. He explains that time is an accumulation, a creeping gradual growth, a duration and that "duration is the continuous progress of the past which gnaws into the future and which swells as it advances;" that is, "the past in its entirety is prolonged into the present and abides there actual and acting."[49] Duration, then, means that the past persists, it is somehow present and active, it is the context from which we can act and nothing is lost of it. The accumulation of the past, and the constant adding of time means that "each moment is not only something new. . . but something unforeseeable; . . . change is far more radical than we are inclined to suppose," says Bergson.[50]

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[47] Bergson had shown that the goal of mechanistic science for the predictability of all things proved to be an intellectual fallacy, because each moment is "something unforeseeable," it is unpredictable and constantly changing. Will Durant, *The Story of Philosophy* (New York: Washington Square Press Pub., 1961), 451.

[48] Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (Lanham: University Press of America, Inc., 1983), 179.

[49] Ibid., 4, 15.

[50] Ibid., 6,1.

These philosophies were, for Marinetti, an expression of power over the artistic crisis of his time, which he felt he could change. The making of those foods in *La cucina futurista* is an affirmation of the philosophical bases Marinetti followed, and a critique of cultural tastes of Italy.

Art & Life

Marinetti's understanding of art and the role of art in life were ideas that were supported by popular modern philosophic inclinations. Nonetheless, these ideas were encompassed into a singular poetic idea – like in *La cucina futurista* – that stressed the importance of access to art for working through the modern crisis of imagination and creativity.[51]

Marinetti saw Futurism from its early beginnings as a movement that would not just bring about artistic innovation but also social and political innovation. The idea was that only though a complete overhaul in life could there be a revolution *to Art*. It was Marinetti's belief that the artist with his superior creativity and imagination, intuitiveness, and vitality uses art as a primary means for self understanding, and through which he contributed to the process of renewal. Through violent artistic actions, synonymous with political action, Marinetti brought about this much needed renewal and betterment of Italian art.

The Futurist project was determined to bridge the gaps between art and life. Indeed, "life was to be changed through art, and art to become a form of life."[52] In addition the inner gaps that existed within both spheres of art and life were to be interpenetrated and dissolved. As a multi-disciplinary spectrum, Futurism was to bring total innovation to all aspects

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[51] Marinetti understood human life as something that is underscored by art. "Thanks to us. . . the time will come when life will no longer be a simple matter of bread and labour, not a life of idleness either, but a *work of art*," Ibid., 206.
[52] Ibid., 47.

of human existence – it was to be nothing short of a total *Reconstruction of the Universe*.[53]

The Futurist artist possessed creative and vital qualities and brought Futurism to the political arenas as a way of sharing a vision of change in art and life. The Futurist is thus that avant-garde artist, prophet of the imagination, pioneering public man, who showed another way that things could be. Despite being so deeply involved in the politics of his day, Marinetti never limited himself by being a politician – he saw he could make a far greater contribution to politics (life) as a poet and artist.

When confronted with Marinetti's actions it is difficult to pigeonhole him either as a poet or a politician. In fact, he succeeded in both roles – as an artist. As poet, he was able *to make* successfully from his life a joyful and eventful world in which to dwell. Futurism tried to elevate human existence to a higher level through art – by making previously non-artistic activities important artistic subjects in themselves. And by giving anyone access to art, Marinetti was giving art a reason to exist. Art served an important existential concern for expressing understanding, happiness, and satisfaction from one's life experiences. By deliberately using food as raw material for making art, Marinetti was underlining nourishment as an artistic endeavor. Food that is made with art becomes a remedy for better living. Thus, living Futuristically meant living artfully.

Marinetti, Mussolini and Fascist art.

The issue of the relationship between Futurism and Fascism is a complicated matter. In *La cucina futurista* Marinetti does make references to the DUCE and Fascism. However, one should not hasten to conclude

[53] Written by Giacomo Balla and Fortunato Depero *The Futurist Reconstruction of the Universe 1915* manifesto combined Futurist innovations in a singular expression.

that it is a Fascist work. In Günter Berghaus' book, *Futurism and Politics* the subject of the many political associations Marinetti and other Futurists made before the founding of Futurism and during Futurism is addressed. Berghaus recreates the tumultuous political landscape of Italy to illustrate its highly interwoven complexity. His book sets about untying and untangling the political threads in a process that is tedious and time consuming, yet urgently needed. His discovery of anti-Fascist Futurists lead him to conclude that "there was more to Futurism after 1924 than being a support group of the Fascist government!"[54]

It was Marinetti's supposed friendship with Mussolini that first lead to the suspicions that Futurism was born with Fascism. Early in 1914 Marinetti and Mussolini had met in Interventionist rallies to voice their opinion that Italy should enter the first war.[55] Mussolini found himself allied with a motley collection of right-wing Nationalists, Republicans, Mazzini youths, Freemasons and Futurists. But Marinetti's constant critique of popular socialists angered Mussolini and hindered them from solidifying a relationship based on their similar interventionist views. With an ill-managed postwar economy both Marinetti and Mussolini found themselves unlikely allies against an inept government.[56]

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[54] Günter Berghaus *Futurism and Politics*, vii. Berghaus states that the reputation Futurism and gained after the end of the Second World War was a result of the strongly anti-Fascist feelings in Italy that condemned anyone or any group thought to have supported the oppressive régime. Berghaus credits Italian researchers, such as Enrico Crispolti, Giovanni Lista and Gian Battista Nazzaro who proposed that Futurism had a nature contradictory to that of Fascism. The eleven points of the *Programme of the Futurist Political Party* (11th October 1913) illustrates this opposing nature, pg., 99. The political program put forth draws the democratic and just aspirations of the Futurists in contrast to the Fascist police state to come.
Many scholars generally studying the artistic works of the Futurists downplay or simply avoided the complex political dimension and ideological positions of the movement. And despite the new research current opinion continually and unjustly paints Futurism in Fascist colours.

[55] At the time Mussolini was a socialist and editor of *L'Avanti* a socialist publication.

[56] Bozzolla and Tisdall suggest that Mussolini's relationship with Marinetti subsisted with a mixture of love and hate, "tinged perhaps with envy and certainly opportunism," (pg., 203) from Mussolini. He had turned to Marinetti when he wanted

Mussolini's ever increasing tilt towards the right left Marinetti disappointed, isolated and unconvinced by Mussolini's Fascism. Marinetti had encouraged a mixture of tendencies – from Anarchistic to Marxist, to the fanciful, and occult. Futurism was a heterogeneous, democratic, and pluralistic association comprised of all sorts of personalities and views, and they did not all share the same ideals.[57] Marinetti encouraged and promoted this aspect to accomplish his goal of spreading Futurism into all aspects of human existence.

The art of the Fascist movement was to be radically non-Futuristic. In architecture, non-Futurist works like the Casa dei Fasci and Mussolini's neo-Roman plans for his EUR (Esposizione Univerale Romana) exemplified the new Fascist taste in architecture. As a Fascist, Mussolini had turned away from Futuristic art preferring the vision of a Roman, Mediterranean and Latin art. This was the ideal that D'Annunzio had projected – a classical clockwork state, ordered and platonic, and thoroughly rational. Futurism would never become the official state art of Fascist Italy. Instead, it was the neo-classical rationalism that found favour. Despite the requisite mention of the Duce and Fascism, *La cucina futurista* remains a Futurist work because of the marked difference between Futurism and Fascism.

It is true that Futurists did collaborate with the Fascist government. Yet along with those who acted jointly with the Fascists, there were those Futurists who resisted the Mussolini-Fascists artistically, politically, and violently. Undoubtedly, there was some accommodation by Marinetti with the Fascist régime. He was personally selected by the Duce to be a founding member of the Italian Academy and his praises of the Duce are

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to exploit the poet's panache, energy and crowd stirring abilities. Other times Mussolini distanced himself from Marinetti's radicalism which he saw as inconvenient and embarrassing.

plentiful. However, having seen the destructive method in which the Fascists and Nazis treated the avant-garde art in their countries it is probable that, Marinetti may have been just protecting his right to create his Futurism by seeming to collaborate.[58] Marinetti remained the poet and anarchist. His radical dislike of discipline, authority, hierarchy, and tradition in culture could never serve the Fascist's abysmal artistic ideals "for longer than a passing hour."[59] Marinetti, was too much of an individual, too pretentious and temperamental, too boisterous to accept their ridged conformity. He would not have it any other way. As one biographer wrote of his childhood temperament, he was "a gentle, volcanic, nostalgic, amazed and sentimental bambinone (big baby)," not unlike the Marinetti of adulthood.[60]

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[57] Within the Futurist ranks were a wide range of diverse political and artistic beliefs. Marinetti had encouraged this aspect of Futurism which in many ways contributed to the longevity of the movement.

[58] By the mid-thirties, as Nazi dogma began to enter into Fascist ideology, increasing anti-Semitic attitudes in art and politics began appearing in commentaries and discussions of Fascist art. Marinetti used his relationship with the Duce to hinder Nazi artistic ideas of censorship, degenerate art, and anti-modernism from gaining firm ground in Italy. By actively organizing meetings to protest the repression of intellectual freedom Marinetti was able to weaken, even if slightly, Fascist intimidation of the artistic community. Incidentally, the cover of the secret police file in the Ministry of Interior, which contains police reports and details of the private and public activities of one Filippo Tommaso Marinetti, read "Anti-Fascist Subject," Berghaus, viii.

[59] The Futurist Cookbook (*La cucina futurista*), 18. Marinetti's individualism is marked by his dislike of, above all things, practices of equality, justice, fraternity, communism and internationalism. His vision of artistic freedom was of an anarchist individualism rather than the conformity of communist collectivism or of Fascist reaction. Without individuality, originality, and inequality, Marinetti could not envision life. It is those qualities that Fascism runs counter to. Fortunately or otherwise, it is those qualities that make life what it is. They create the flux, the peaks and valleys, the wealth and poverty of life that contribute to the making of our stories – not the "smooth communism of the billiard ball," Bozzolla and Tisdall, 205.

[60] Christiana J. Taylor *Futurism*, 2.

TEXT AND INTERPRETATION

CHAPTER I

The Metaphor

If we are to really appreciate *La cucina futurista* we should not be afraid of reading it constructively, despite the presence of the unsettled philosophic and political perspectives that may have influenced its development. It does serve some purpose to acknowledge the artistic influences and political landscapes of Marinetti's time so that we may better imagine his horizon, but they should not bar us from appreciating the creative, imaginative, and colourful expressions or wordings of *La cucina futurista* for a constructive conclusion with architectural bearing.

The text for this thesis is based on Suzanne Brill's 1989 English language translation of Marinetti's *La cucina futurista*. Brill's translation is the only English translation of the text. And while the actual translation is good and suiting to the original text, the form of its presentation, the curious design, and spelling mistakes leave much to be desired. The layout of the translation is confusing, it also leaves one unsure of the translation's faithfulness to the original. A new translation should include the original text and layout. Brill has also chosen to translate the title of the book as *The Futurist Cookbook*, which I believe to be unfaithful to the Italian word *cucina* – meaning *kitchen*, *cooking* or *cookery*. The word *cucina* elegantly opens up the relevance of the text and avoids the singular meaning implied in an idea of a cookbook. I have chosen not to translate the title, persevering the original *La cucina futurista* to its literal ambiguities, which in turn emphasizes the book's wide range of topics, that include food related and non-related issues such as imagination, creativity, art, architecture, play, sex, festival, suicide, nationalism, war, etc.

This text about food – its making, its presentation, its eating, its involvement in our lives and bodies, and its communicative and symbolic significance – is a metaphor about the making of art in a time, that is ever markedly different from the past. Marinetti redefines the past ideas about food, what constitutes food, and the manner of combining the ingredients for making dishes, by underlining it as an artistic process – yet in a mode that is appropriate and accessible to those who read it. This was important to Marinetti who objected to the over intellectualizing of academics, specifically in art and poetry.

I read the text as a poetic metaphor for the creation of an architecture that can become creative with its raw materials. Marinetti's discussions of making Futurist dishes are in fact, discussions about art and architecture, all related to the experience of living in modernity. However, the book is more than just a metaphor about art. Through the book, Marinetti celebrates life, the process of living, a love of the body as a thing of wonder rather than condemnation. My thesis will attempt to flesh out this existential dimension of *La cucina futurista*, which serves to remind us that, architecture is a bodily exercise as well as an intellectual exercise.

In *La cucina futurista* the ancient ways of making or cooking, and eating, as well as the food itself, were deemed to be no longer suited to modern living. In the same way that Marinetti rejected Italy's hold on the old ways (the monumental and antiquarian) as inappropriate, he also rejected the old relationships Italians had to their foods (arts). In such a time of crisis man needed to restore his faith and use of imagination along with his creative skills to discover better ways in which food could become a remedy rather and a hindrance to modern living – how and what one eats has a profound effect on how he lives. Paralleling Marinetti, I believe that how and what we *dwell* in and around, too, has a qualitative effect on our lives.

The message to us is that: confronted with our present post-modern situation, we cannot wholesale create historical collages, and that "creating the new" as Venturi puts it should not mean "choosing from the old."[61] Marinetti challenges the reader to create new solutions to the current problems and hardships of living. We have come to believe that everything has been done, that one has no choice but to pick styles from the past because, he dare not think he can *imagine* and *create* something original - which is a rather pessimistic attitude. *La cucina futurista* challenges, as all Futurist works do, the individual to make something from oneself, and of oneself, to invent and cook a new recipe that can satisfy the present and desire for the future, and to acknowledge the primacy of man as an embodied, living, breathing, being.

Marinetti's reasons for writing *La cucina futurista* become apparent from the first page, they being: "the lofty, noble and universal expedient aim of changing radically the eating habits of our race, strengthening it, dynamiting it and spiritualizing it with brand-new food combinations in which experiment, intelligence and imagination will economically take the place of quantity, banality, repetition and expense." The aim of the book was "to create a harmony between man's palate and his life today and tomorrow," because "until now men have fed themselves like ants, rats, cats, or oxen. Now with the Futurists the first human way of eating is born. We mean the *art* of self-nourishment. Like all the arts, it eschews plagiarism and demands creative originality."[62]

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[61] I am in agreement with Richard Kearney who is critical of the postmodern method that collages "visual idioms from past traditions" as a critique of the modernist imagination. The postmodernist stance against modern progressive thinking and utopian proposals, is also critical of the ethical and poetic imagination. *The Wake of Imagination* (Minneapolis: University of Minnesota Press, 1988), 20.

[62] F.T. Marinetti, *La Cucina Futurista* (The Futurist Cookbook), trans. Suzanne Brill, 21.

Anti-pasta

The culprit hampering Italians from being able to deal with their crisis was *Pasta*. For Marinetti pasta, a staple of the Italian diet, was worsening the effects of the Great Depression by rendering Italians impotent in the face of hardship. The book attacks pasta (the past),[63] because it was responsible for evacuating the energy and creativity of the Italian leaving him unable to resort to action.[64] He writes: "Pastasciutta, however agreeable to the palate, is a passéist food because it makes people heavy, brutish, deludes them into thinking it is nutritious, makes them skeptical, slow, pessimistic."[65] Marinetti points out that a "bloated stomach does not encourage physical enthusiasm for a woman, nor favour the possibility of possessing her at any time."[66] This possessive act is itself a metaphor for an affirmation to action. Thus *La cucina futurista* is meant to assist us as "an antidote to this panic [of artistic crisis] a Futurist way of cooking, that is: optimism at the table."[67]

The attack on pasta as a retardant symbolizes Futurism's attack on the monumental and antiquarian attitude towards the past in Italy, and her inability to counter the drowsiness of the pasta (past) to become creative. As a Professor Signorelli writes: "In contrast to bread and rice, pasta is a food that is swallowed, not masticated. Such starchy food should mainly

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[63] I am making a connection between Marinetti's attack on Italian pasta as burdensome, and his attack on the Italians' attitude towards their burdensome past.

[64] Sexual virility was seen by Marinetti as a positive passionate driving force of creativity. Sex was an exercise in artistic creation, a willing to power as in *taking the bull by the horns*, without which we would not be creative. "The voluptuousness of the palate, however, is for both men and women always an upward movement through the human body. We also feel that we must stop the Italian male from becoming a solid leaden block of blind and opaque density. Instead he should harmonize more and more with the Italian female, a swift spiralling transparency of passion, tenderness, light, will, vitality, heroic constancy. Let us make our Italian bodies agile, ready for the featherweight aluminium trains which will replace the present heavy ones of wood iron steel." *La cucina futurista*, 36.

[65] Ibid., 33.

[66] Ibid., 41.

be digested in the mouth by the saliva but in this case the task of transformation is carried out by the pancreas and the liver. This leads to an interrupted equilibrium in these organs. From such disturbances derive lassitude, pessimism, nostalgic inactivity and neutralism."[68]

Marinetti sees pasta as synonymous with the Italian's uncritical attitude towards history and art. The Italian does not chew the pasta (past) but swallows it, he/she is uncritical of it because he/she does not digest it in the mouth, that is, he/she do not address it, break it down, think and speak about it. Non-digestion (non-critique) of the starchy pasta (past) leaves the body ill, unbalanced, and prone to crisis.

The Creativity and Imagination of Cooking

Cooking is thus the metaphor in *La cucina futurista* for the creation of art. Cooking is the artistic process through which one can create relevant meals that are better suited to our modern selves. Let us look more closely, then, at cooking.

Cooking is the act of *creating* by bringing together different ingredients – it has the result of releasing and satisfying our bodies from *hunger*.[69] Cooking brings these ingredients together, hopefully creating

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[67] My brackets, Ibid., 21.

[68] Ibid., 37.

[69] See "Architecture as the Site of Reception," *Chora I: Intervals in the Philosophy of Architecture*. Donald Kunze describes hunger as a hunger of the senses which is located "antipodal to the self." The work of art pushes us to anticipate that future moment for a rendezvous with it. *In La cucina futurista* cooking does not only imply the making of edible foods, but also includes non-edible food – an apparent contradiction in terms. Marinetti envisioned food has having a wider purpose than serving only as a metabolic fuel. The word 'hunger,' here, means not only the functional requirement for metabolic fuel, but also intellectual and desirative hunger that fills the imagination.
Marco Frascari in *Taste in Architecture*, JAE 40/1, Fall 1986, has made the analogy that contemporary architectural production makes buildings that "look good" during a predefined life-span. This is like fast-food which is designed to be "gulped down.

pleasure from manipulating them, chopping, boiling, building, heating or freezing them in different ways. The many different dishes in *La cucina futurista* (and in the world) testify to humanity's creative abilities to satisfy itself festively and gastronomically. We cook our food, and we eat our food in different ways, but each has his own way. We bring our creative and imaginative skills to bare when we cook. We cook to bring delight not just for ourselves but to the other person who eats with us. Cooking is special, it is not a "necessity" for life – animals don't cook, and yet we do. Cooking, then, is beyond basic necessity, it is necessary in a different way - in an artful, poetic way. Not all cooked food is meant to taste great, medicines are also foods, their different purposes heal our bodies either medically or magically. Cooking, the act of creating food for our well being is then an important medicinal act humans perform. For this reason, it is not just done haphazardly, instead there is an alchemical science to cooking, the cook is demanded to know and respect the power of his ingredients, his imagination, and his ability to cook for his diners, and to consider the appropriateness of the situation for which he makes the food. The cook must know himself. In the section titled *Nourishment by radio*, Futurist cooking demonstrates a sensitivity to the diner, it will "create meals rich in different qualities, where for each person dishes will be designed which take into account sex, character, profession and sensibility."[70] This way of making food and cooking would firstly be sensitive to an individual's needs. Mirrored, such personalization is comparably rare in current architecture and building, as homes and other buildings are stamped like hamburgers onto the landscape without any ceremony or consideration of the individuality and humanity of the dweller.

Creativity has etymological connections to *crescere*, meaning growth. In the act of creation, things are grown out of oneself. Creativity is an

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They are a feast for the eyes but there is no possibility, no reason, to take the time and pleasure to taste them," 3.

[70] *La cucina futurista*, 67.

individual exercise of discovery and growth. Consequently, individuality demands creativity. And creativity must figure into every dish the Futurist cook creates. The creative aspect of cooking is carried by the word *poiesis*, which is Greek for, making or producing, but differentiated as a distinctly human way of making. Cooking is poetic because it is an activity that is particular to humans. Architecture is poetic because it, too, is particular to humans. Both share creativity as their pathway to exploring the possibilities of imagination to lift man into the realm of artful making.[71]

Creativity is the handmaid of imagination. When we are most creative our imaginations seem to run with our creativity each inspiring the other like the double helix of a DNA strand. Our imagination is the largest part of us. It is in fact the place where we will spend the rest of our history. In times of crisis it is our imagination that we first call upon to provide the immediate and necessary solace for our comfort and relief, giving us hope and answers to our predicament. By the words *our imagination* I imply not just a collective mental act, but also a unique and personal act that all living individuals possess. The human imagination is not only for idle contemplation of fantastic things – it also opens up the place in which humans form their interpretations of the world. We all understand and know by forming unique and personal interpretations that both depend on, and are encouraged by our imagination.

Nonetheless, our imagination is not so personal as to be imprisoned within us. Humans have become apt at sharing their interpretations of their own interpretive imagination, for interpretation by others. We share our personal images by creating things (food, architecture, art, and

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[71] Marco Frascari writes: "Architecture and gastronomy employ similar procedures of production. As James Fergusson pointed out, the process by which a hut built to house a holy image is refined into a temple, or a covered market transformed into a basilica, is the same as that by which a boiled neck of mutton is refined into *cotelettes à l'Imperiale* or a grilled fowl made into a *poulet à la Marengo*...both

language) through which we can express ourselves to the other. There is a balance between our need to express ourselves to the other and our imagination. Imagination also gives us the unique and magical ability to place ourselves altruistically in the others shoes, whether in the place of someone standing in front us or, in a long ago time. *La cucina futurista* is an imaginative work in which Marinetti along with various artists have collaborated to express and impress their unique and poetic imaginations for others to read and dream.

From the beginning of *La cucina futurista* its author says that this Futurist "culinary revolution" will change "eating habits" with foods in "which experiment, intelligence and *imagination* will economically take the place of quantity, banality, repetition and expense."[72] As a poet, Marinetti believed strongly in the power of imagination in art and life. He was also interested in imagination as the place from which original and fantastic poetic images of a particular fictional life (a Futurist life) would come to endure and ease the crisis of modern art and life. Consequently, the Futurist imagination is not a flight from reality but a fantasy of a reality that counteracts the present critical reality. In a critique of a theatrical play of D'Annunzio, he was unhappy with the "exaggerated and minute realism" of the presentation which, for him, destroyed the "poetic splendour" of the text.[73] Marinetti believed it was more important that theatre overcome the banality of everyday life experiences rather than recreating them accurately. Theatre was to have "a useful influence on the human soul like (and sometimes even more than) alcohol and love, by making us forget reality and instead giving us access to the world of

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disciplines face ill-defined problems and solve them using conjectural procedures. JAE 40/1, Fall 1986, 6.

[72] Marinetti's opening statement is highly critical of any notion, of function, rationalism, or other utilitarian aims like: price, quantity, repetition which all stress pragmatism over poetics for creating food (art). My italics. *La cucina futurista*, 21.

[73] Günter Berghaus *Futurism and Politics*, 18.

dreams."[74] Overcoming everyday banality did not mean fleeing into imagination, but rather it meant bringing those dreamscapes to ~~bare~~ bear upon a concrete experience of life.

Architecture too, can fulfill Marinetti's demand for intoxicating the human being into a possible imaginative fiction. What better subject is there for architecture than to be an accomplice in someone's life-dream. Here architecture becomes the threshold through which one enters into a story. Architecture is that "transporter beam" that flings the soul into another time and another place.[75]

In the *Poetics of Reverie* Gaston Bachelard suggests the role of imagination to be a portal from which one can have access to other worlds, and so gather a sense of the possibility of becoming something else.[76] Bachelard's philosophy and Marinetti's Futurism seem to agree on several points about the primacy of the poetic imagination. Although, Bachelard contextualized his discussion on imagination mainly within the *reverie* or day-dream, one can still draw a connection to Marinetti's demand of theatre to enroll the viewer into another universe, such that "this dreamed world teaches us the possibilities for expanding our being within our universe."[77] Bachelard emphasizes the relevance of the *dreamed world* for

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[74] By discovering dreams Marinetti was interested in exploring irrationality as a basis from which to create art – prefiguring Surrealism. Ibid., 18.

[75] One can see architecture as threshold, analogously to the shaft in Alice in Wonderland, or the Tornado in the Wizard of Oz.

[76] "In a more general way, one can also understand the great value in establishing a phenomenology of the imaginary where the imagination is restored to its proper, all-important place as the principle of direct stimulation of psychic becoming. Imagination attempts to have a future. At first it is an element of imprudence which detaches us from heavy stabilities. We shall see that certain poetic reveries are hypothetical lives which enlarge our lives by letting us in on the secrets of the universe. A world takes form in our reverie, and this world is ours. This dreamed world teaches us the possibilities for expanding our being within our universe. There is *futurism* in any dreamed universe. Joé Bousquet wrote: 'In a world born of him, man, can become anything'." Gaston Bachelard, The Poetics of Reverie, trans. Daniel Russell (Boston: Beacon Press, 1969), 8.

[77] Ibid., 8.

opening up and baring upon our lived world in the same way Marinetti calls for theatre to do. In *La cucina futurista*, Marinetti builds a world very much outside of the everyday. In this different world he performs Bachelard's description of poetic imagination which seems at first glance to have "an element of imprudence," but is really meant to successfully detach "us from heavy stabilities" or everyday realities. The recipes, dinners and theoretical bases in *La cucina futurista* have this imprudent, destabilizing, and transportive element in their imaginative formulations.

Bachelard also agrees with Marinetti as to what purpose might be served by imagining these dreamed universes. When Bachelard writes that "imagination attempts to have a future," he points the imagination towards a *futurism* for creating a different, hopefully a better world in which our poetic needs may be met. *La cucina futurista* is Futurist work because it creates a *futurism* in a *dreamed universe* where imagining, creating, and eating food becomes an experiential, "hypothetical" and poetic undertaking. Again, there is an ethical dimension to the poetic imagination when it proposes a future, for all, that is unlike the present.

The architect is challenged with the responsibility to *imagine* a better *futurism*, that creates architecture in which the human being can also become the imaginative being. Architecture invites the human in, transporting him into imaginative narrative experiences, in which he can change poetically. Instead, many modern buildings have actually conspired to cancel this human compulsion or need to resort to imagination by breeding a failed mechanical functionalism of convenience and comfort, designed to sever the imagination from the imagining body.[78] *La cucina futurista* went in another direction and away from the modernists. Rather than clean up the unpredictability or surprises of being human it chose to

[78] "What is missing from our dwellings today are the potential transactions between body, imagination, and environment," say Kent C. Bloomer and Charles W. Moore in their *Body, Memory, Architecture* (New Haven: Yale University Press, 1977), 44.

revel in humanity. It resorted to the imagination to invent different ways of overcoming crisis and boredom, in which its authors found themselves.

Improvisation

In *improvised dinner* the painter Luigi Colombo Fillía has outlined the demands and requirements of the cook who is confronted with the call to improvise (create). "These improvised dinners are recommended as a means of bringing together maximum originality, variety, surprise, unexpectedness and good humour."[79] Fillía demands of every cook that they acquire certain attitudes that may test their creative capacity and inventiveness when confronted with these unexpected and surprise moments. In fact, the ultimate test of creativity for any cook or architect is improvisation where creativity is at its most critical level. This impromptu tests the creator's ability to deal with what is at hand, to shape, and rethink his design quickly. Improvisation does not resort to calculative thinking 'planning out,' rather it throws the body against the task at hand. The hand thinks its own way when it is left to improvise. For improvised dinners Fillía essentially points to four basic demands.

Firstly, Fillía hints at an essential idea in Futurist cooking, that questions the role of food in Futurist life. For instance, should food be created to just taste good, or does food have other possibilities equal to or more important than taste. Unfortunately, Fillía restricts these other possibilities to aesthetics and does not elaborate other possibilities. However, by opening up the possibilities for creative cooking, and by creating food that does not pretend to only taste good, the act of cooking is saved from any notions of basic palatability. In other words, cooking becomes a poetic act of making food that quenches other thirsts. The implications of Fillía's first point for architecture can serve as a foundation

[79] Ibid., 133.

for a critique of architectural theories that propose only rational and functional purposes for architecture. In other words, is architecture (cooking) only about making efficient shelter (metabolic sustenance fuel), or can architecture ask other questions and invite or fulfill other demands?

Secondly, the cook must have a feel or grasp for those who are to eat his creations. She must be able to "conceive of an original architecture for every dish, in such a way that EVERY PERSON HAS THE SENSATION OF EATING not just good food but WORKS OF ART."[80] Fillía is saying that eating should not just be responsible for canceling hunger. Instead, he stresses that eating has a direct emotive change on the eater, who not only eats food but "works of art." Not surprisingly, when Fillía describes his dishes as "original architecture," he not only connects food and architecture, but also the human experience of food and architecture underlining the oral experiences in both. Juhani Pallasmaa tells us, "the most archaic origin of architectural space is in the cavity of the mouth . . . Architectural experience brings the world into a most intimate contact with the body."[81] We are perhaps reminded of the giant human head at Bomarzo – its entrance is an open gaping mouth that leads into a room.

Both food and architecture can be creative enough to spark within the person sensations or epiphanies that can truly change the course of that person's life. Architecture becomes a remedy able to regenerate within the eater a sense of life, and what it means to live as a human. In *La cucina futurista*, some dishes are actually designed by architects such as Enrico Prampolini and the Bulgarian Nicolaj Diulgheroff as well as others.

Thirdly, for unknown reasons the cook may not know who he is cooking for, until they appear before him. For the cook to assume he can produce a universal dish that can satisfy all tastes, regardless of "age, sex,

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[80] Ibid., 133.

physical make-up and even psychological factors," can be a culinary disaster. By studying these various traits the cook arrives at the reason for making a particular dish for an individual. As a test of the cooks abilities, Fillía demands that neither the cook nor staff "take into account the personal taste of the diners."[82] Why? If the cook were to ask the diner of his preferred tastes she would be discounting her own (the cook's) culinary creativity, making unnecessary any reasons for creating improvised food. The architectural implications here are clear, architects who confine their practice to standardized minimums or average requirements for creating architecture, are not meeting their own minimums or average requirements for the human creative imagination. Modernism was notoriously arrogant in its assumptions of universality, and its dependence on the science of human factors as a framework for the design of living spaces – for example socialized housing.

The final attitude the cooks need acquire is a creative sense of presentation or delivery. Here all the characteristics of creativity, mentioned, of affirmation to freedom, change, originality and unpredictability are thrown together in dinners in motion. Dishes are placed on "moving carpets" or conveyor belts that carry the dishes in front of the diners. The diners exercise their culinary preferences or freedoms by seeking those dishes they want. Fillía reassures us that the active and vital exercise of leaping at the preferred dishes, "would encourage the human spirit of adventure and heroism," both implying freedom, unpredictability, and a sense of the artistic task of creating purposefully, from a particular starting point unimagined stories or feats.[83] Simply put, this means that both the architect and the persons he creates for, should not be afraid of grabbing what they want, whether it is an idea or something tangible.

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[81] Juhani Pallasmaa *The Eyes of the Skin* (London: Academy Group Ltd., 1996), 42.
[82] *La cucina futurista*, 133.
[83] Ibid., 133.

The Function of the Cook

Good cooks have great responsibilities and they are often a mixture of poets, philosophers, magicians, doctors, pharmacologists, engineers, and lawyers. They are also architects. What, then, can we state about the role of the architect today reading through *La cucina futurista*?

Although cooks are only mentioned in passing, their mention is without much emphasis on their talents as chefs, and they are mostly grouped with other restaurant staff. There were not many Futurist cooks at the time of *La cucina futurista* – most according to the book resisted the Futurist palate. "A Roman chef," says Fillìa , "threatened Futurist cooks with thunderbolts from the Italian Academy of Gastronomy," and it was "Fillìa versus Artusi."[84] None of this is surprising considering Marinetti's contention with professionals in general, especially in the realm of the arts. It was flattering to Marinetti that a Roman chef would be resistant to Futurist cooking, and it is yet another telltale sign (from Marinetti) of the antiquated preferences Italians favoured from their culinary arts, and other arts. Fillìa continues: "if the academic cooks challenge us purely on reasons of technique, they are beaten; their opposition as artisans cannot win against our strength as artists."[85] Meaning, the Futurist cook is not a specialized technician whose narrow interest will centre solely on technique. The Futurist cook is an artist who uses the range of his talents and imagination to mix edible and non-edible things, to poetically create food for the spirit.

We find an illustration of the purpose of the non-specialized Futurist cook at the beginning of *La cucina futurista* in a narrative entitled *The Dinner That Stopped a Suicide*. In this story the cook is not a chef with a

[84] *La cucina futurista*, 69, 79.

predictable task rather, he must resolve an existential crisis through cooking. The story may illustrate a position of the responsibilities of the architect.

As the story goes, Marinetti was suddenly confronted with a crisis. A close friend and Futurist named Giulio Onesti is contemplating his suicide. Marinetti quickly rounds up Enrico Prampolini and Fillía, to head in search of their friend's villa, nestled behind a park, and situated at the edge of a lake. There, they find their friend sad and lonely convinced that he would take his own life that night.

"'Unless?' cried Prampolini.

'Unless?' repeated Fillía.

'Unless?' concluded Marinetti, 'unless you take us instantly to your splendid, well-stocked kitchens."[86]

At this point Marinetti orchestrates a coup d'état in the villa's kitchens. Prampolini orders: "Our ingenious hands need a hundred sacks of the following indispensable ingredients: chestnut flour, wheat flour, ground almonds, rye flour, cornmeal, cocoa powder, red pepper, sugar and eggs. Ten jars of honey, oil and milk. A quintal of dates and bananas."[87]

They receive their ingredients immediately, and set about "emptying them into pyramidal heaps of yellow, white, black and red and transforming the kitchens into fantastic laboratories where enormous upturned saucepans on the floor changed into grandiose pedestals predisposed to supporting unpredictable statuary."[88] They begin to *make* with whatever skills they possess. Some created openly, others like Prampolini, "jealously surrounded his creative work with screens."[89] They spend roughly an

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[85] Ibid., 70.
[86] Ibid., 24.
[87] Ibid., 24.
[88] Ibid., 24.
[89] Ibid., 25.

entire day in the villa's kitchens having made, "22 edible sculptures under 11 electric lightbulbs."[90]

Guilio's female friend arrives that evening and reviews the procession of sculptures, asking all four to explain their actions. Marinetti, Prampolini and Fillia deliver their reasons as to why they uniformly decided to *make* with edible material such deliciously ephemeral objects. They said "We love women . . . All of the forms of hunger that characterize our love guided us in the creation of these works of genius and of insatiable tongues . . . an artistic expression so intense that it demands not only eyes and admiration, not only touch and caresses, but teeth, tongue, stomach, gut - all equally in love."[91]

Giving their answer, and after an exhaustive day of furious making the three guests collapse and sleep into the next day. Giulio is sleepless. He gets up and sneaks to the sculptures, to *eat* them? By dawn he is finished *eating* the sculptures. He is cured.

When Marinetti receives Guilio's message of sadness and his plea for help, he at once rushes to his friend's aid. Remembering *the improvised dinner*, Marinetti quickly assesses this unpredictable situation at hand. With intuition he selects Prampolini and Fillia to aid him on this mission to save his friend's life. Marinetti sees his friend's willingness to relieve himself of life as a mistake. Suicide for Marinetti, is not an option to be considered in times of crisis, not because it is the easiest and most effortless option, but because it is an artless option without an imaginative and creative struggle. Accordingly, Giulio should not consider suicide because he has not fully exhausted all his options, and the options of others. Giulio lives alone in a "veritable Royal Palace" with "well-stocked kitchens," which amazes Marinetti, not because it is an architectural

[90] Ibid., 27.

wonder to be awed at, but because Giulio has so much and yet he cannot find the imaginative and creative impetus to make something out of what he has, he is paralyzed, and has lost the joy of life. Doctors are often faced with the problem of creating for a patient, who has lost some important part of his body, the desire and willingness to live by helping the patient discover the joy in continuing to live. Often finding joy in life becomes half the battle.

Giulio is the architect of today who surrenders himself to the fruitless post-modern philosophies that emphasize the scarcity of options, despite the potential and wealth of possibilities present all around him. These philosophies of intercontextuality hastily discount the imaginative and creative potential of humans to work with what is at hand, and to discover new truly ways of becoming. When Marinetti discovers Guilio's kitchens he immediately sets his creative wheels in motion. He promptly demands and gets the ingredients he needs to make the sculptures – he is affirmative and confident in his skills as a cook to *make*. The architect must be able to respond intuitively to a given situation that she has not made, but suddenly finds herself in. She must in times of crisis turn to *her* imagination and *her* creativity to discover *her* manipulative skills, then share *her* solutions with others. It is thus a duty of the architect to contribute in this way through making in order to re-install meaning and an optimism, and a joy in living.

Marinetti has come to Guilio's villa to help him overcome a crisis. Giulio has arrived at this crisis because he cannot see a way to live, and he has lost confidence in himself. Marinetti helps Giulio by bringing him in with the efforts of the three, and letting him in on the creative process of making a sculpture which was, "designed by Marinetti and constructed under his direction by Giulio Onesti, unexpectedly turned sculptor-cook."[92] Marinetti's directions to Giulio have allowed Giulio to discover a skill that

[91] Ibid., 28.

only moments earlier he did not know, showing him that he had not exhausted all his potentialities. He has brought Giulio into the process essentially allowing him to help himself. Marinetti's directions to Giulio, and their creative relationship and collaboration, can be interpreted as an indication of the possibilities of theory as a means from which one can overcome a creative crisis to discover a way, a skill or, an inspiration. The narrative makes it unclear to what extent Marinetti directed Guilio's constructive efforts. Interestingly, neither are dependent or independent on one another. Marinetti has not drawn a diagram for Giulio to follow, and because their method of making is improvised each has to be willing to respond to changes and unpredictable interpretations with creativity. The three guests construct *for* Giulio, and they also construct *with* Giulio. With his direct involvement, Guilio's name merged into the procession of names earning the title of sculptor-cook along with Marinetti, Prampolini and Fillìa. The improvised cooking process represents the improvised life we all lead. It is also a function of the architect to involve those he makes for and those he makes with into the creative process.

When the work is done and presented to others to encounter, the architect must be able to distance herself from the work, and to allow those who encounter it to do so freely. The architect must be prepared to face the unpredictability of interpretations of the work from others. Towards the end of the story, when Giulio emerges after the others have slept, to eat or make love to the edible sculptures, he does so freely. The sudden sleep the creators fall into signifies the end of their involvement in the making process. How and when the sculptures are to be eaten is left to those who eat it. Thus the architect offers her solutions, gives birth to the work, then withdraws. This is another one of the architect's duties – letting those he creates with to experience the work in freedom.

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[92] Ibid., 25.

When Giulio emerges into the armoury he first finds *The Curves of World and Their Secrets*, a tall feminine sculpture. "Kneeling before it he began like a lover to adore it with his lips, tongue and teeth."[93] He eats sculpture after sculpture, "at dawn he devoured the mammellary spheres of all mothers' milk."[94] The authentic physical experience of licking the sugary works, of eating them one after the another slowly till the early hours of the morning, in freedom and without fear, convinced Giulio that he should not take his life. These sculptures gave him the answer, to perhaps a hidden question, as to why he should continue to live. The shear physicality of the experience was enough to re-install the joy of living, and to fill Giulio with a conviction in the value of being an embodied being. If previously he had neglected to remember he had a body that situated him in the world, this sugary feast would fill his stomach with its memory. Marinetti's cure to Guilio's suicidal tendency was simple, he would simply remind his friend of the joy of being alive, of breathing, of eating, and of wanting. Guilio's experience of himself was almost exclusively bodily.

Towards the end of his unbridled feast Giulio releases "a flood of vain tears," he runs "out bare-headed into the park" feeling refreshed. His life was now filled with new meaning "he felt at the same time unencumbered, liberated, empty and bursting. Enjoying and enjoyed. Possessor and possessed. Unique and complete."[95]

Perhaps one of the most important duties of the architect is to cast a similar spell on the individual who experiences a work of architecture. It is a spell in the sense that the individual – like Giulio – is driven to an experience of architecture that is embodied. The architect makes architecture that needs to be physically experienced, that tempts and teases the individual, to lick and eat it metaphorically, in the same way

[93] Ibid., 29.
[94] Ibid., 29.
[95] Ibid., 29.

Marinetti's edible sculptures drove Giulio to eat them. The architect should be interested in how an individual encounters, interacts and grows with an architecture. This calls for a realization that any encounter with an object (food or architecture) becomes an experience that addresses all our senses.[96] This requires an architecture of the senses, "a haptic architecture of the muscle and the skin."[97] The most successful architectural creations are those that connect us to the world, by impressing upon our bodies the world about us. Architectures that strive for efficient living discount the experiential *connecting* time an individual needs in order to experience. With such estranged architectures there is only anonymity in both the individual, and the architecture. Neither know of the other's presence.

Making architecture that engages us as embodied human beings within a bound contextual frame, like a story, is the ultimate task of architecture. Marinetti's sculptures do this precisely. Marinetti did not come to Giulio to satisfy a selfish goal of eating large amounts of pastry. Instead, he and the others came to resolving a problem that was common to them all – they came together to *make* for the common good of all – the sculptures were made and offered openly for all. Thus, a duty of the architect is to make and offer up cures *through* architecture. Medicines can be architectural too. Perhaps these edible sculptures were *smart* medicines that were made to help each character individually: Giulio, to show and remind him of a better existence, the three guests, to quench their imaginative and creative needs, the woman, to surprise, and honour her as an agent of wholeness and totality, and as the impetus for their creative works.

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[96] "In a process of "transformation," the tactile icon of the fact is embodied in the artifact, such as the enjoyment of eating a successful gourmet dish, or dwelling in a successful building," Frascari, 7.

[97] Juhani Pallasmaa *The Eyes of the Skin*, 48.

Banquet as Architecture.

The banquet is an event that takes up much room in *La cucina futurista*. As an event the banquet became important in Marinetti's Futurism. Firstly, the banquet is a natural extension of the Futurist *Serate*. And banquets fulfilled or illustrated many of Marinetti's concepts regarding total theatre, but compressed within the idea of banquet. There are four accounts of Futurist Banquets in the book for the reader to imagine and enact.

I would like to show that the Futurist banquet was an artistic endeavour made to involve the diner by engaging his senses in a fiction of food. The diner's experience of the Futurist banquet can be seen as analogous to an experience of a work art – as that experience of art has been outlined by the German philosopher Hans-Georg Gadamer.[98] In describing the experience of art, Gadamer emphasizes the festive essence of the work of art. This festive essence is present in the experience of the Futurist banquets in *La cucina futurista*. Gadamer's illustration of the festive elements in the work of art and in the theatrical experience, makes up the essence of one's experience of architecture. The main elements tying festival and art together include: the *immediacy* of the experience, its capacity for *gathering*, the *fiction* or story element, and the particular *temporality* of the event. I extend my argument by saying that the banquet experience represents a constructive metaphor upon which a more suitable attitude towards architecture can be construed.[99] The idea of banquet as a metaphor for architecture takes into consideration Gadamer's expositions

[98] Hans-Georg Gadamer, *The Relevance of the Beautiful*, trans. Nicholas Walker (Cambridge: Cambridge University Press, 1986). See also PART II, Festive Character of Theatre, 57.

[99] In *Architecture as the Site of Reception*, Donald Kunze suggests that the body is the site of reception of the work of art. He writes: "To talk about the reception of the work of art, we must talk about art as if we were eating it," 88. Arguably, the banquet is an ideal site of reception of the work of art.

of the festive character of art, marrying these considerations with architecture, to create an architecture that is participatory and meaningful.

Any banquet is a place where persons come to gather, to eat and experience food as well as the company of others. Those gathered at a banquet, gather into an organic body in which all become immersed as they eat, speak, flirt, and play with one another. The banquet is the place where our embodied selves gather to participate in a concrete experience where food plays a significant role, but not the only significant role.

From the earliest days of Futurism the banquet represented the place where Futurists and Futurism were presented to the public. This gathering became an essential element of Futurism, as in the early *Serate* of the First Futurist period or the lavish three hundred guest multi-coursed banquets of later Futurism. Banquets in their various forms were a way of exhibiting Futurist art, poetry, film, and the Futurist life to a curious and sometimes hostile public.[100] The banquets immersed the participant into a total happening where various artistic works, including food, were exhibited for the diner to experience sensuously. In addition to food and art, the total experience included speech making, excitement over what was about to be eaten, as well as staged brawls strategically timed through the course of the festivities to create surprise and commotion.

The Futurist banquets not only challenged the gastronomic palate with bizarre food combinations, they also went up against every accepted conception of food a diner may have had. Some foods were perhaps "too poetic to be appreciated by the needs of the stomach, which as everyone knows is a crude materialist."[101] In that sense these foods lived up to their

[100] The banquets were scandalous public events that became the next day's talk among the Italians, who shared the sometimes comical reports of the pervious night's happenings in newspapers that gladly reported on these, "food sculptural orgies," calling them: "extraordinary gastronomic experiments." *La cucina futurista*, 91.
[101] Ibid., 91.

anti-pasta position, which espoused creativity and virility in opposition to filling necessity.

The manner in which these banquets were held recalls something of a festival atmosphere, and particularly that of the carnival.[102] They also included a colourful list of characters, locals and non-locals, Futurists and non-Futurists. The large numbers of guests, required the banquets to be well prepared. These banquets were held in different cities and presented as unique and spectacular moments, when really they were largely recurrent, but never repetitious. Every banquet was an individual undertaking and an autonomous work. Groups of Futurists nomadically traveled between cities bringing along with the banquets poetry readings, painting exhibitions or theatrical productions.

Gadamer illustrates the festive character of the work of art by highlighting the autonomous manner in both, the festival and the work of art. Gadamer writes: "naturally, this quality need not always be associated with joy or happiness, since in mourning we also share this festive character together. But a festive occasion is always something up lifting which raises the participants out of their everyday existence and elevates them into a kind of universal communion."[103] Gadamer's essay puts forth several important points about the festive nature of art, on which I wish to dwell and associate back to architecture via the Futurist banquets. I would therefore regard Gadamer's interpretation of the work of art as a worthy explication of the work of architecture.[104]

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[102] Banquets were usually announced weeks or months in advance emphasizing and sensationalizing their undertaking. In fact, "once a Futurist evening had been announced in a city it was awaited as an event to be experienced at all costs." Angelo Bozzolla and Caroline Tisdall, *Futurism*, 153.
[103] *The Relevance of the Beautiful*, 58.
[104] Ibid., 59.

One of the most striking elements of both festivals and banquets is their *immediacy*. By immediacy, I mean the genuine experiences that come upon the participant or diner. The banquets in *La cucina futurista* exhibit this very immediacy in the shock of experiencing dishes that bring surprise, revulsion, heightened awareness, and fantasy along with other states of being. There is an immediacy of experience in tasting something never before tasted, but this immediacy is further heightened when everyone around is experiencing a similar attack or *fertilization* of the senses. To be bound up with other people is an essential characteristic of the existence of each of us, indeed, "the being of man is 'being with' ('mitsein')."[105] The banquet dishes elevated the diner's awareness of his presence by being convoyed and accompanied during the dinner with other ingredients like perfumes, music, or special lighting, all "designed" to intensify the embodied experience of eating a poetic surprise such as, an African date pregnant with a stuffed anchovy. These immediate experiences remind the diner of his embodied nature with an electric sensation of what it means to be alive, to eat while breathing scented air, in a place filled with others whose experiences you can also imagine because they are also your experiences. This was the lesson Giulio leaned at the end of *The Dinner that Stopped a Suicide*

The idea of *gathering* of 'being with' is another important point. Festivals essentially rely on there being people present "gathered together before what they encounter." Gadamer adds: "the celebration of a festival is, in technical terms, an intentional activity. We celebrate in as much as we are gathered for something, and this is particularly clear in the case of the experience of art."[106] Futurist banquets were usually associated with art exhibitions, poetry readings or other works of art, but they were also works of art in themselves. These banquets were works of art because for everyone gathered, there was an intention that brought them together and

[105] Mary Warnock, *Existentialist Ethics* (New York: St. *Martin's* Press, 1967), 13.

united them for a particular experiential encounter. The work of architecture unites separated individuals because it can resonate within a gathered group of individuals a particular 'frequency' that seems to fill what divides them with a communality of experience within a concrete unity (fiction). The dinning table around which people gather to eat, speak, flirt and so forth does precisely what the work of art or architecture is meant to do, by elegantly wedging itself between diners, it circumscribes an outline of intention, it unites those around it by plugging them into a concrete unity (fiction). The work of architecture demands that humans be present and gathered to experience and celebrate it.

Another point about festivals has to do with what generates the reason, or *story* for gathering. Festivals occur because there is a story that grounds the event, and provides the frame in which the festival actions occur. All festivals have fictions into which the participant enters. All the Futurist Banquets have a story – they are only playfully different in the case of every banquet. And despite their various themes, all banquets share an essential structure that ties them to one another, but also allowing each to enjoy a certain degree of autonomy dictated by the occasion. Gadamer makes this point when he writes, "there is a concentration of the beautiful, which is shown precisely by the fact that we may make a range of possible changes, by altering, replacing, adding or removing something. Nevertheless, this is only possible on the basis of a central structure which must be left intact if we are not to destroy the living unity of the work."[107]

The central structure of Futurist Banquets is the dinner gathering where the participant is immersed to experience a fiction called Futurism. The different guests, palates, locations, speeches and fights are those elements that come around to dress the central structure of the banquet as the need arises. In this way, the banquets can be at once different and

[106] Hans-Georg Gadamer, *The Relevance of the Beautiful*, 40.

unique, but also similar and related to one other. The story is indispensable to the work of art, and the work of architecture. By making stories, humans can relate their physical and imaginative experiences to one another through allegorical packages, that say "I am here."

The banquet fictions like other festive experiences enjoy and make their own *temporality* outside of the normal, pragmatic, everyday clocktime. We are familiar with the temporality of the slow torment of boredom and the quick evaporating temporality of deadlines. However, these two extremes of time says Gadamer, are experienced as definite periods that must be "spent."[108] That is, they are still related to clocktime because they are clocktime slowed down or speeded up. Gadamer proposes another experience of time, "autonomous time," which is characteristic of the festival and the work of architecture. *Autonomous time* is a period of time that cannot be measured mechanically, it fills itself, much like our experience of "childhood, youth, maturity, old age and death," it has no definite start or end points.[109] This "autonomous" temporality is the temporality of a story into which the participant can loose herself. The total immersion into the banquets peels the diner away from a experience of life – synchronized by the clock – by allowing the diner a temporal experience that was dictated by and dependent upon, the qualities and experiences of eating the strange Futurist dishes. For instance, time can seem to slow as a diner makes his way through a *Fire in the Mouth*, or speed up as one swallows *The Regenerator* in one gulp.

Theatre held a notable place in Futurism and the movement brought great changes and innovation to the theatre. Futurist Banquets exhibited a sense of theatrical presentation. Michael Kirby has documented the innovations of Futurist performance underlying the important, yet

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[107] Ibid., 43.
[108] Ibid., 42.
[109] Ibid., 42.

unrecognized, impact and influence these performances had on the theatrical performances that came after Futurism. One connection that Kirby did not address involves the theatrical nature of the banquet. A year after publishing *La cucina futurista* Marinetti published his *Total Theatre*, in which the ultimate theatrical experience was to be had. There is a connection between *La cucina futurista* and *Total Theatre* in the similarity of the intended experience. Both use diverse elements such as music, smells, poetry, painting, film, radio, and television which were combined with audience participation to create a totaling and immersive experience for the participants.[110]

Arguably, the Futurist banquets are perhaps a realization of Marinetti's unfulfilled concept of Total Theatre, where a desire to remove the "Fourth wall," that separated the performance from the audience, was actually realized – only in the form of a banquet. Similarly, there is not a 'Fourth Wall' in festival celebrations, instead, the participant is brought into the action (fiction), and lifted into a communal experience where "everyone is gathered together before what they encounter."[111] The fourth wall only succeeds in separating the participant from the work through an invisible intellectual barrier that prevents a true experience of the work. The festival goer is not a voyeur (arguably like the traditional theatre goer) but an important participant whose subtraction reduces from meaning of the festival. Futurist banquets and theatre bridged the gap between the performer and the participant as though in a carnival or festival. In the experience of architecture there, too, is not a fourth wall, but rather an immediate concrete experience. Yet the question of participation in

[110] For a *Total Theatre* Marinetti had designed an imaginative circular theatre that was never built but that resembles the structure of Futurist banquets. Michael Kirby, *Futurist Performance*, 89. Marinetti has, already in 1932, turned his attention to television. I believe this further emphasizes an earlier point that accented Futurist need to conquer new technologies, for the purpose of art.
[111] Hans-Georg Gadamer, *The Relevance of the Beautiful*, 40.

architecture cannot be taken for granted, as "aesthetic distance" is often part of the architect's misguided intentions.

The Futurist interest in banquets as a vehicle for imaginative and creative thinking can be a constructive base for a more suitable attitude towards architecture. This attitude can lift the experiencer of architecture into a fiction that engages and involves, like that of the diner at a Futurist Banquet. The multi-coursed meal banquets are poetic tropes, metaphorical architectures where every course is a particular room in an architectural creation that tells little stories (each with a particular temporal character) within a larger story. The experience of architecture is without conceptual barriers, rather the experience is full and enveloping to our senses.

Current architecture either lacks this festive characteristic or wishes to de-emphasize it, a status quo that generates buildings without stories and ultimately without purpose or meaning. Many modern buildings have become meaningless because they too tell nothing to their guests who come and go without having learned anything about themselves. Architecture should be a banquet that invites and envelops individuals for the sake of life. In this way the banquet metaphor seems an obvious metaphor from which to cast a different more creative and imaginative ground upon which an architecture may be created. This different architecture will poetically combine, different ingredients in a collage that will attempt to engage the human capacity for surprise, wonder, mystery and magic. Architecture is such a magical place where the range of human characteristics are to be gathered and exercised.

Chapter II

The Ingredients for Architecture

The pervious chapter centred around an interpretation and a discussion of the latent creative and imaginative potential still open to man to discover a meaningful common ground from which to create and share architecture. There was a discussion of the Futurist banquet as a metaphor for creating architecture that can assume the task of a common ground. By virtue of being a work of art that is festive, architecture can gather and assemble people "in a participatory experience."

In this chapter the discussion will turn around the ingredients of architecture. Every cookbook recipe demands a certain set of ingredients from which a particular dish is created. By ingredients, I mean the elements that maybe creatively combined to provoke and evoke a particular sensory experience in us. The Futurist work of art poetically combined ingredients in a collage (synthesis) to create *States of Mind* such as surprise, shock, wonder, magic, agility, virility, and creativity. [112]

The ingredients are combined in a particular way as dishes, so as to convey a *story*. In *The Bachelor Dinner* meals are created and directed at a certain task or program to which it answers. Marinetti presents a Futurist dinner cooked to help a young bachelor overcome the "usual pitfalls of eating alone."[113] All the ingredients that constitute the different dishes, as portraits of possible guests, are poetically combined to evoke in the bachelor States of Mind that would help reconcile the loneliness of eating alone. As the bachelor eats the food portraits, he also is in effect in

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[112] *States of Mind* was a Futurist term describing the qualities of an environment. The description is both of the physical and psychological experience of a moment. See Christiana J. Taylor's *Futurism, Politics, Painting and Performance* (Michigan: UMI Research Press,1979), 23.

dialogue with the portraits that accompany him during the dinner – he is no longer lonely and enjoys his food more. Marinetti realized the importance of framing the food portraits within a story that grounds the action, and lays down a fiction with which his reader can participate in. The work of art needs a narrative to provide a reason and a context for making it.

This chapter will discuss the possibility of creating architecture with the help of Marinetti's metaphor of cooking food. The chapter will interpret a number of different ingredients Marinetti uses to create the "provocative and evocative"[114] experiences when one is poetically engaging his cooked creations. The different ingredients, although treated here individually, overlay one another, teaming up like an orchestra to create various experiences.

Motion

Perhaps one of the greatest preoccupation of artists and philosophers during the nineteenth and twentieth centuries was movement, its characterization and depiction.[115] In art motion was a complex affair. The new invention of the camera and motion-pictures presented movement in a photographic mode, as a series of still images that produced the illusion of a perception of motion. Not all artists were content or believed that motion could be depicted in such a manner. Bergson had associated the successive series of motion-pictures with mechanistic clock time, devitalised due to the eternally static nature of the individual still

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[113] *La cucina futurista*, 115.
[114] Ibid., 101.
[115] The nineteenth century was also the century of science, it was a time of quantification and mechanization, scientific theorizing and explanations In science, motion as a causal effect of movement was important to figures such as Poincaré, Person, Mach, and Einstein who achieved great progress in mathematics having concentrated on concepts of time and motion along with the traditional geometry of space. Incidentally, Artusi's book calls cooking *la scienza in cucina* (the science of cooking [the kitchen]). Cooking in the nineteenth century is now a science.

images.[116] Bergson understood all movement as flow, not a span to be divided into lengths, parts, and progressions like on a clock, but rather as a fluid and persistent stream. This indivisible current of movement was time, which he believed to be the essence of life, and perhaps of all reality. Life was a question of time rather than of space, it was not a position, it was change; it was not quantity but rather quality.

The Futurists sided with Bergson. In the first few years of the movement the Futurist painters, (along with others like, cubists, and impressionists) in particular the painter Umberto Boccioni, tried to depict motion (*dynamism*) according to an interpretation of Bergsonian philosophy. *Dynamism*, as it was called in Futurism, was understood as *motion* which is an inherent quality in an object to be intuitively sensed by the artist. The Futurists claimed that they could sense motion in an object because they could intuitively feel the movement of its atoms and molecules. It was more important for the Futurists to capture an object in *motion*, rather than in *movement*, because by depicting motion an emotion could be shared about the object between the artist and the spectator.[117] Unique to Futurism, the spectator played an important role as a collaborator. The artistic work had to involve the spectator who shared the artistic sensitivities of the work with the artist. The Futurist artist focused on the possibility of what joint participation through motion could afford both the artist and the viewer.

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[116] Maurice Merleau-Ponty, *The Primacy of Perception* (Evanston: Northwestern University Press, 1964), 185. This explains why the work of Bragaglia, the Futurist photodynamist, who created photographs with extended exposures showing the traces of movement – was never accepted by Boccioni, who felt it did not convey *motion*.

[117] See Christiana J. Taylor's, *Futurism: Politics, Painting and Performance*, 22, and Rosa Trillo Clough's, *Futurism*, 78, for a discussion of the pictorial Dynamism of Futurism, and specifically the Futurist interest in movement with respect to the other modern artistic movements of the period.

However, after the First World War the depiction of motion on canvas and sculpture was no longer emphasized.[118] During this second period of Futurism theatre and aero-poetics became the dominant artistic pursuits for Marinetti and his Futurists. This noticeably changed the manner and poetics of motion in Futurism, altering their earlier understanding. In *La cucina futurista* the use of motion becomes metaphorical and theatrical, and perhaps more interesting from an architectural standpoint.

In Futurism and in *La cucina futurista* the significance of motion lay in its and interplay between the body and the world. Motion mediates the world to the body. Bergson had pointed out that "the objects which surround my body reflect its possible action upon them."[119] Indeed, architecture is unique among the arts because it is present to our bodies to a greater degree than in the other arts. Buildings are experienced in a full and concrete way.

A relationship between the body and architecture is made in the manner we approach and encounter it, eventually journeying from room to room, and traveling up and down between floors. Within a particular building, we confront doors, pushing or pulling them we measure their weight against our strength. Motion is suggested to us as we encounter and enter *through* a door, or look to someone outside, *through* a window.[120] Some years after Bergson's statement, the French phenomenologist Maurice Merleau-Ponty echoed Bergson.[121] Merleau-

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[118] I believe that with Carra's and Serverini's abandonment of Futurism, but more specifically with Boccioni's death, the previous emphasis on philosophy for artistic qualification became no longer prevalent. As opposed to painting and sculpture, the new direction into theatre was perhaps a result of its importance to the main figures of post-war Futurism like Prampolini and Depero.

[119] Henri Bergson, *Matter and Memory* (New York: Zone Books, 1991), 21.

[120] Juhani Pallasmaa *The Eyes of the Skin* (London: Academy Group Ltd., 1996), 45.

[121] Maurice Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London: Routledge and Kegan Paul Ltd., 1962), 137. "sight and movement are specific ways of entering into a relationship with objects. . . . 'Each voluntary movement takes place in a setting, against a background which is determined by the

Ponty suggests that through sight and motion the body establishes a particular relationship with the world, and that motion itself carries with it an intentionality towards the object. For instance, "in the action of the hand which is raised towards an object is contained a reference to the object, not as an object represented, but as a highly specific thing towards which we project ourselves, near which we are, in anticipation, and which we hunt."[122] Motion, then, is a significant and indispensable part of our human condition – motion is one of the foundations that shape our experiences and perceptions of art, and architecture.

It was in motion that the diner was to be made aware of her vitality. Being in motion, meant that one was in Life: living and breathing. The diner was placed in a controlled relationship with the food. She confronts these cooked "original architectures," that are unknown to her.[123] She begins examining them with her eyes, then her hands, lifting a morsel to her nose, then to her mouth. With her tongue only slightly cognizant, she takes the food through a tour of the mouth – the diner tastes. The food is chewed. Different taste sensations open up, some explode in the mouth without notice, others develop and die, and yet others lay dormant, their surprise awaits. The swallow is different for every morsel. Some glide off the tongue smoothly, others – being dry – have to be forcefully swallowed with a drink of *White Rose*. And others are too big and must wait longer until they become suitable for swallowing. The swallow is a powerful reminder that we are not separated and outside of the background. The food, once external has moved and become part of the diner.[124]

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movement itself. . . . We perform our movements in a space which is not "empty" or unrelated to them, but which on the contrary, bears a high determinate relation to them: movement and background are, in fact, only artificially separated stages of a unique totality.'

[122] Ibid., 138.

[123] *La cucina futurista*, 133.

[124] M.F.K. Fisher defines herself as a Gastronomical being. In her book, *The Gastromomical Me* she pays attention to the sensations of her body when she eats. She makes constant connections between the food she eats and the place she eats in.

Having moved through the multi-course dishes, the diner realizes their effects on him. The seventh course, *Edible Landscape*, has cast a spell upon him, by eating it he is simultaneously filling his thoughts with the fantasy of taking the beautiful blonde seated across from him.[125] The different courses have taken him on a sensory journey – like Giulio, the diner rediscovers and re-founds once again "the joys of living," by grasping that his embodied nature, his human condition, is grounded in motion.[126]

Motion is a threshold through which a particular experience can be presented, as in the Futurist banquets. This fiction places the diner in a world filled (*Total*) with sensations that impress the environment upon his body, externally and internally, as he eats, listens, talks, plays – carrying on in action with the food, and those around him. Through "sight and movement" the relationship he has to this world – of food, people, music, and so forth – is induced by the peculiarities of the differing qualities in the foods, and the repetitious sequences of the different courses. They in turn regulate the tempo of his motions.[127] The diner, through motion, enters into a relationship with the objects of his "background." Eating becomes a dance of sorts, timed and rhythmical. This choreography is crucial for the banquet, and integral to its meaning. It is this precise space between the object, or background, and the body that is important to the experience of architecture.[128]

The motions the diner performs in relation to food are not inconsequential. The food was cooked, composed, and built in order to "restore taste and enthusiasm to eating, to invent dishes that induce

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[125] Ultravirile and Edible Landscape, are Futurist aphrodisiacs designed for ladies and gentlemen respectively. "Highly enjoyable." Ibid., 78.
[126] Ibid., 68.
[127] Maurice Merleau-Ponty, *The Phenomenology of Perception*, 137.

happiness and optimism and multiply infinitely the joy of living: this is something we cannot possibly get from the dishes we have the 'habit' of eating."[129] Deliberately then, and without using knives and forks, Futurist dishes were intended to set the diner into a new relationship with food – a fresh experience that was outside of the diners habit.

Having been moved, the diner discovers a new way to be and live, inspired by the experience of eating these "crazy" Futurist dishes.[130] The experience of architecture is not very different from the experience of eating an interesting dish. The architect must gather ingredients and make architecture that can bring or carry a similar type of enthusiasm to living. The architect makes a place that takes the inhabitant through a nomadic journey of experiences, and through which he enters into a vital relationship with the architecture.

Surprise

To introduce surprise into life is to introduce a sense of magic, wonder, imagination, and freshness. The use of surprise in the Futurist movement was a way of introducing the possibility of something to instantly lift one into fiction, to suddenly imagine and see something unexpected in a different and unforeseen way, and to create an unforeseen use for something never imagined before. Surprise is that unexpected discovery that rewards with a pleasurable experience, or an epiphany. Surprise was often employed as an unexpected electric shock designed to disrupt any hints of monotony, habit, stagnation or immobility – that is Antipastaism. Accordingly, surprise is an important and indispensable ingredient of the architectural experience. It can remind us of our

[128] The "background" of the movements in a banquet – with its particular setting of chairs and tables, walls and partitions, doors and windows – becomes the horizon where the motions or emotions, of the diners are to be grounded and related.
[129] *La cucina futurista*, 68.

embodied natures with its power to concretize the experiences of life – architectural, culinary, or otherwise.

Along with the Founding manifesto of 1909, the Futurist manifestos of theatre introduced and elaborated the use of surprise in art. In the *Surprise Theatre* manifesto of 1921, Marinetti argued that "surprise is the essential element of art."[131] He argued that even a Botticelli projected elements of surprise, but that with time its shock has worn out. The Surprise Theatre manifesto, along with other theatre manifestos, defined surprise as either whimsical shock such as the juxtaposition of unlikely things to spark wonders, or as innovation (technical or otherwise).[132] Surprise was seen as a remedy that would purge both theatre and life, of the stagnating boredom of Italian art. The diner would discover surprises that moved him out of the habits of life.[133] These habits have paralyzed Italy's instinctive ability to act freely by stagnating her imaginative and creative skills.

By *La cucina futurista* a deeper understanding and employment in Futurist art of surprise, as a genuine instrument for creating imaginative sparks, ripened. In the *Manifesto of Futurist Cooking* [134] a departure from the previous emphasis on surprise as innovation, to an awareness of the capability of surprise for the creation of wonder, and making figurative use of poetic tropes. The wonder came from an unexpected encounter that created a pleasing unconventional moment. For instance, "the use of

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[130] Ibid., 36.
[131] Christiana J. Taylor, 81.
[132] "Our Theatre of Surprise proposes to exhilarate by surprising through contrasting methods, facts, ideas which have not as yet introduced to the stage, entertaining conglomerations which have not as yet taken advantage of but capable of cheerfully shaking human sensibility." Ibid., 81.
[133] Unexpected events or epiphanies were meant to "hit with merry surprise the sensibility of the public" and to, "provoke in the public words and actions which are totally unexpected, so that one surprise will evoke new surprises in the theatre, in the city that very same night, the next day, ad infinitum ." Ibid., 81.
[134] *La cucina futurista*, 33

proscribed doses of poetry and music as surprise ingredients to accentuate the flavours of a given dish with their sensual intensity."[135] The surprising effect is created by the careful use of music and poetry to accentuate the meal. Rather than being background elements, poetry and music were seen to actually contribute to the flavour of the food. Without them the food tasted differently altogether. The implication is that music, for instance, can surprisingly change the taste of a strawberry.

Surprise was a poetic ingredient to enhance the diner's appreciation of a dish.[136] It was mixed with other feelings. For example, "under the eyes and nostrils of guests," different dishes were presented in between courses to heighten the diner's "curiosity, surprise, and imagination," but not to be eaten.[137] Surprise, delicately employed created for the diner an anticipation for *eating* those dishes that have ignited a curiosity (upon taking these wondrous dishes visually and aromatically), a desire, born out of an embodied imagination, for the moment when the possibility of eating these dishes actually arrives.[138] The surprise is greater when the diner is revisited by those dishes he previously met and desired.

Present in the manifesto is the use of Surprise for creating unexpected images. The manifesto calls for the creation of magically "simultaneous and changing canapés which contain ten twenty flavours to be tasted in a few seconds. In Futurist cooking these canapés have by analogy the same amplifying function that images have in literature. A given taste of something can sum up an entire area of life, the history of an amorous passion or an entire voyage to the Far East."[139] The unexpected

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[135] Ibid., 40.

[136] "6) The use of music limited to the intervals between courses so as not to distract the sensitivity of the tongue and palate but to help annul the last taste enjoyed by re-establishing gustatory virginity." Ibid., 40.

[137] Ibid., 40.

[138] Our imagination is tied to our embodied fact, such that, when food is craved it is done so in a complementary manner – both physically and imaginatively.

[139] Ibid., 40.

flood of images that pour from the diner's mind, after eating these cinematic canapés surprises, because one does not know when and if such a mental evocation will materialize, nor where it will lead. This is perhaps a fitting description of the complexity of architectural meaning in our experience of buildings. Like the canapés, every room in a building can be a special moment, that induces memories, fantasies, or epiphanies.

The most sophisticated form of surprise used was juxtaposition. It involved the cook's ability to alchemically juxtapose two or more ingredients, and combining them to reveal a third unforeseen result. The juxtaposition of tastes, for instance, that of an African date stuffed with an anchovy – of sweet date and salty anchovy, of fibrous and slippery, of fruit and fish, reveals poetic differences that surprise and excite the senses, not just at the extremes, but through the full range of endless combinations. The Futurists had even invented a kitchen appliance called the *Electrolyzer*, which was to "decompose juices and extracts, etc. in such a way as to obtain from a known product a new product with new properties."[140] This kitchen appliance was a collage-making device. A collage, despite being made of many pieces, assumes its own autonomy as a result of the harmonious unity of its many juxtaposed pieces. The emphasis on surprise in *La cucina futurista* is largely a celebration of the poetic accident that can at once change one's life, revealing to the body what had been concealed as in the arrangement and juxtapositions of a collage.[141]

The relevance of surprise in architecture could parallel the relevance of surprise in *La cucina futurista*. And surprise should remain an important element in architecture – having been marginalized, planning always rules and this implies predictability. But in *La cucina futurista* and in architecture meaning is revealed in a pleasurably unexpected way, and serendipitously strikes at the heart of what it is to be human. Surprise is

[140] Ibid., 40.

an agent of curiosity and poetic discovery, it may evoke mental images from our past which suddenly become present as if they are still being lived. And then there is the sensory surprise of touching, noticing, and measuring the texture of food with the hands before eating it. Coupled with imagination it leads to discover something never noticed before, perhaps a concealed path through a wooded park, an aromatic or medicinal garden secretly enclosed behind a tall wall, the surprising texture of touching a particular door handle that invites and leads you to enter. Surprise, tests one's ability to improvise and think differently, even irrationally. Surprise, wonder and magic can greatly enrich our monotonous and rhythmically predictable modern lives, with a festive shock of unexpectedness and joy. That, after all is life.

Play

In the conclusion to *The Wake of Imagination* Kearney argues that, if an ethical imagination is not to "degenerate into censorious puritanism or nostalgic lamentation it must also give full expression to its *poetical* potential." Kearny uses the word poetical in the "sense of 'inventive' making and creating carried by the word poiesis." Any expression of the ethical imagination should tap into its 'poetical potential' because "the imagination, no matter how ethical, needs to play. Indeed one might say that it needs to play *because* it is ethical - to ensure it is ethical in a liberating way, in a way which animates and enlarges our response to the other rather than cloistering us off in a dour moralism of resentment and recrimination."[142] Kearney sees in play and in the carrying out of play a reason for imagination and a basis upon which to make and create poetically. Kearney has charged the post-modern imagination with being non-ethical, and of using the paradigm of play to parody cynically, rather

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[141] Marinetti's own Tactile paintings, were largely collages of objects. Ibid., 138.
[142] Richard Kearney, *The Wake of Imagination*, 366.

than to conclude with an offer or a position for dialogue for an other to consider.[143]

Play is a way "to a general rediscovery of the poiesis dimension of our world."[144] Indeed, with play we can explore other different and possible ways of existence. Play allows us the surprise to fall out of habit. And play gives us the opportunity to see things in a different light, to rework or make things fresh and wondrous. In *La cucina futurista* Marinetti takes hold of history and plays with it, inventing historical characters and points of view out of which he playfully spoofs history. Marinetti plays with history – questioning and scandalizing the possibility of historical truth and historical objectification, in little humorous articles like *Schopenhauer and Pasta*, or *Pasta Originated with the Ostrogoths*. Humour is important. It allows Marinetti to critique issues in art and society. What can Marinetti's exercise of play in *La cucina futurista* offer to the creation of an ethical architecture today?

Play was a significant element in *La cucina futurista* largely because it represented two important elements. Firstly, play involved motion. Motion, as discussed earlier, represented life as *Dynamism*. This life force was seen as an internal quality, allowing a body a degree of freedom, self-movement, and therefore change. Secondly, the importance of total theatre emphasized the criticality of role playing. Inside the defined context of theatre, the Futurists played different roles with each other creating and intending fictitious worlds, such as in the banquets. On the whole, Marinetti had discovered that the creation of a work of art demanded of the artist that he *play*. Play was one of the bases for creating art, while the work of art itself invited play.

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[143] The imagination is even regarded by certain post-modernists, as a questionable, undemocratic, and authoritarian human quality.
[144] Richard Kearney, *The Wake of Imagination*, 367.

Gadamer sees play as a vital instinct whose motions allow us to commune with the work of art, and with others. "Play is so elementary a function of human life that culture is quite inconceivable without this element," reports Gadamer, to the degree that, human play is a "given" part of our condition.[145] And while it is true that animals play, human play is distinct from it in that, "the playfulness of human games is constituted by the imposition of rules and regulations that only count as such within the close world of play."[146] Within a frame of rules and techniques, human play becomes distinct amongst other forms of play, because it sets itself particular "non-purposive" aims which it consciously pursues.[147] Writing, cooking, and architecture have rules and techniques of their own, some are purposive such as structural computations etc. However, the majority of rules and techniques in architecture are "non-purposive," allowing the architect the freedom to define and adjust them to the work.

Play grants its participants access to a particular intended fiction where they play out their roles, relating to one another in an invented way. Play is the act of not only following those rules and accepting their consequences, but more importantly, of discovering ways around and between those rules, bending and twisting them around skillfully, manipulating and contorting them for the "non-purposive" aim of gaining expertise and becoming the better player. It would be inconceivable if architects did not play to some degree with their architecture. Both making and experiencing the built end of architecture involves play, such that architecture becomes that moment when those gathered enter into play with the architecture itself and between themselves. In making, architects must play with the rules of architecture and materials in the non-purposive manner Gadamer emphasizes. That process is an imaginative process that is put forth to the experiencer of the work, who benefits form it.

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[145] Hans-Georg Gadamer, *The Relevance of the Beautiful*, 22.
[146] Ibid., 124.
[147] Ibid., 23.

Gadamer's analysis of play can perhaps serve as a description of the intended idea of *La cucina futurista*. In the first instance, play involves constant repeated movements – the work of art exhibits a certain alternating, back and forth movement between artist and participant. In the *Serate* this was actualized in the interactions of artist and spectator in the form of insults and projectiles of fruit. In the banquet these *to* and *fro* movements perhaps are in the differing complexities of eating the strange dishes. The Futurists would devise greater poetic obstacles of wondrous dishes for the diner to experience and overcome – the diner playing along, would call for greater challenges to sever him from his burden of pasta. In this way a conversation of food developed, going back and forth from cook to diner. This *to* and *fro* action of cook and diner, casts both into a particular fiction where each plays with the other. The one creates for the other's enjoyment, the other eats for the one's creations, this is called *playing along*. Similarly, the *to* and *fro* of architecture is the reciprocation of experiences between the architect who imagines and creates (and lives) a particular fictional narrative, and the experiencer who enters the fictional narrative discovering it, changing it, finding unexpected uses, and delivering them to the architect.

The consequence of "playing along" is that everyone "takes part" in carrying through with the playing, indeed they "go along with it," and play takes on a communicative role.[148] In the Futurist banquet we observed that by *gathering* into a banquet the diners became connected and immersed in banquetness. This banquet air filled the space that once divided them. When the banqueters ate they became connected and were communicating to one another. The place of play is delineated by the common intention of the play. Gadamer states that the intention for one thing to be something underlines the *as if* quality in play that is taken up by all those who

[148] Ibid., 24.

participate.[149] Architecturally, this means recognizing that architecture is more than what it is meant to be functionally. A house may be a place that protects us from the elements or a container for our belongings, but it is also more than that. Its form, materials, layout, and how it is dwelled in combine to tell a story about its inhabitants. Architecture, can benefit by adopting a similar playful attitude to the creation of a place for imaginative and creative action poetic play.

The act of poetic play illustrated in the series of adjustments and manipulations upon the built surroundings is a form of play that is architectural. The act of making architecture must be playful, from design to execution, otherwise architecture may become a mere ornament (at best) to a utilitarian structure. Gadamer writes that it is this very playfulness that the art.[150] The inhabitant of architecture must too be allowed to play. The conception of architecture as a finished end-product that is ideal and suited to what its function leaves out the inhabitant as a potential creator. Modern architecture in particular was impressed with the idea that architecture can be a manufactured product, a machine, specialized to specifically fulfill a particular role. Architecture is never a finished product, but an evolving environment that playfully changes to suit its inhabitants. It must be allowed to grow and expand, as well as to reduce and contract. Play is a fundamental human need which defines our

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[149] This *as if* quality that Gadamer hints to lays out a particular fiction which draws a spectator. However, a spectator is more than just an observer. "the common element in play. . . namely, the fact that something is *intended as something*, even if it is not something conceptual, useful, or purposeful, but only the pure autonomous regulation of movement." Ibid., 24. A theatrical play is more than a show. With the actors truthful portrayals of their characters, an audience is taken by the story they tell.

[150] "For in human fabrication as well, the decisive moment of technical skill does not consist in the fact that something of extraordinary utility or superfluous beauty has emerged. It consists rather in the fact that human production of this kind can set itself various tasks and proceed according to plans that are characterized by an element of free variability. Human production encounters an enormous variety of ways of trying things out, rejecting them, succeeding, or failing. 'Art' begins precisely there, where we are able to do otherwise." Ibid., 125

humanity in its many representations as architecture, art, music, and sport. Although some contemporary architects do emphasize play in their work, formal games sometimes seem to exist as a superfluous display, rather than an artful representation of a type of play that calls forth participation, dialogue with others, and the possibility of imagining oneself as another.

Vision & Touch

Architecture is a physical experience – walking into a room the body measures and plots its path. The space between the architecture and the body is the space of our senses, not just the traditional five: sight, touch, smell, hearing, and taste, but all the infinite collaborations they create when they melt together to experience the surroundings. The senses are an important part of the human experience, their manipulation or use in architecture is important to our overall sense of being in the world. The senses have an existential importance, they inform and measure the environment against our bodies by planting our bodies in the world – through our senses we gain an experience of self.

The poetic degrees of sensory involvement become ingredients for architects to try, relate, and tie into a particular experience of architecture, spicing it with such flavours as hot or cold, rough or smooth, dark or light. This use of sensory ingredient should, however, graft the experience of the architecture with the narrative of the architecture, relating them in a complementary way. Without a story, a sensory emphasis may seem superfluous.

The nature of Futurism, its glorification of concrete experiences, its emphasis on bodily perceptions, and its overall demand for a physical experience of art gave the sensory experience a large degree of significance. In *La cucina futurista* all the senses are woven together in

dishes and experiences that were meant to "induce happiness and optimism and multiply infinitely the joy of living."[151] *La cucina futurista* recognizes the importance of all our senses questioning particularly the hegemony of vision. In *A Dish with Sounds and Scents* the Marinetti appeared to recognize only the traditional five senses.[152] However, he was not entirely convinced by the existence of only five senses. In his 1921 manifesto *Tactilism*, he indicated that "the distinction of the five senses is arbitrary and someday surely numerous other senses will be discovered and catalogued."[153]

The relationship between the senses in *La cucina futurista* is not without design. All the senses were to be managed and orchestrated to synchronize with the meal. In *A Dish with Sounds and Scents* the careful orchestrated use of sensory stimulants to heighten the experience of eating can be easily studied. Here the use of perfume spray dispensed by electric fans, with "measured doses of poetry and music", along with Tactilisms (tactile devices) come together to form a total experience.[154] The diner eats an olive, a candied fruit, and finally a fennel bulb, all the while he rubs his index and middle fingers against a particular tactile device: a tactile representation of a vagina. As the diner *eats*, waiters spray the air with perfume while gracefully dancing to a Wagnerian opera.

The Futurists cautioned those who might consider these extra ingredients (to be *eaten* by the other senses) as stimulants. Instead, the Futurists considered for instance, the perfume and music "as actions to create in the diner an optimistic state of mind singularly conducive to a good digestion. . . . the perfumes, music, and taclilisms which season Futurist food bring about that playful and virile state of mind indispensable

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[151] *La cucina futurista*, 68.
[152] "Eating Futuristically, one uses all the five senses: touch, taste, smell, sight and hearing." Ibid., 77.
[153] Christiana J. Taylor, 93.
[154] *La cucina futurista*, 77.

after lunch and at night."[155] Clearly, the Futurists did not consider these extra elements as exterior decor or peripherals to the food, but rather as integral ingredients that affect the taste and experience of eating.

Despite its gimmicky nature and potential limitations, Marinetti's proposal represented an imaginative challenge to break from a traditional experience of art that was primarily visual, detached or voyeuristic. Marinetti's message for the *cook* was that he create food that would bear upon the diner, effecting and engaging her through her various senses for a positive outcome. Rather than be detached, the Futuristic mind was to participate in a biological life with the body, along a track of irregularities, of surprises and emotions. The ban on knives and forks and a reversion to the use of the hands for eating punctuates the Futurist argument for physical contact, exemplified in "the punch and the slap."[156] The knives and forks symbolized the Cartesian detachment of mind from the physical sensing body. These implements hardly informed the diner about the thingness of the food she was to eat. Handling the food by hand became crucial to the experience of eating these artful works.

There was in *La cucina futurista* and in Futurist philosophy a special awareness of the sense of touch. Juhani Pallasmaa writes, "the eyes want to collaborate with the other senses. All the senses, including vision, can be regarded as extensions of the sense of touch; the senses are specializations of the skin. . . . Even the eye touches; the gaze implies an unconscious touch, bodily mimesis and identification."[157] Pallasmaa is suggesting that without a sense of touch, the other senses, especially vision, would be unable to express many essential qualities about objects such as their weight, texture, and spatial attributes. He argues that the

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[155] Ibid., 41.
[156] Umbro Apollonio, *Futurist Manifesto*, 21. See also the Futurist dish *Fisticuff Stuff* in *La cucina futurista*, 154.
[157] Juhani Pallasmaa *The Eyes of the Skin*, 29.

primary sensory experience by which we enter into a relationship with architecture is touch. "Our eyes stroke distant surfaces," says Pallasmaa.[158] Our ears also touch the air whose waves beat on the ear's drum. And, odour too, is touched by the microscopic bristles in the nose. Perhaps Marinetti, too, understood that "vision reveals what the touch already knows."[159] He ascribed a particular importance to the manual handling of food and other objects because, touching them revealed a particular truth, or an other sidedness that was not apparently tangible with the eye, but that was just as magical and surprising.

Far from being just a visual experience, architecture is also a tactile experience. In architecture touch is the truer experience. Those architectural drawings the profession keenly relies on to represent views of buildings in the form of impossible flat facades, cannot show the buildings as they are. Only through touch (being there) do we experience in architecture: the front step that lifts, the railing that guides, the front door handle that greets, and the rooms that echo – all become available to us when we touch them. Architecture is in a way similar to Marinetti's Tactilisms which deliver a particular truth about a thing that can never be revealed with just vision. In the same way that a snake's skin may appear slippery or slimy, once touched it becomes quite the opposite: smooth. In the space between the world and the surface of the skin an experience of architecture can be weighed and measured against our perceptions. In that space the world constantly rubs against our bodies. And it is in that space that surprises arrive to touch and enrich our life, granting us imagination and fantasy about what lies outside of our bodies.

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[158] Ibid., 29.
[159] Ibid., 29.

Chapter III

Qualities of Materials.

Architecture is not only ideas, but is also a tangible object that is made from real materials. How are materials important to architecture? What then can be learned from *La cucina futurista*, that might have architectural bearing for us, in terms of the creative use of materials?

The choice of materials, in all the diverse fields of Futurism, was from the onset a matter too important not to be artistic. Early in the history of Futurism, there was a rejection of the traditional use of materials which relegated their use to either practical, or to trivial decorative concerns. In *La cucina futurista* the selection of materials for cooking ingredients becomes an important matter. The various recipes give an idea of the variety of ingredients that were to be handled skillfully to create those dishes in the book. The selection of materials was not without careful thought; the step of choosing a palate of ingredients for a particular dish was undertaken as a poetic and artistic act pregnant with meaning.

The Futurists believed that the particular materiality of a thing was not an embellishment to an object. Neither was material a passive, static, neutral, or aesthetic thing that would be applied independently to an object.[160] They believed that an object's material qualities interacted with the space of the viewer, rendering that environment in a total experience. In other words, the physical qualities of an object become a conduit through which sensations, and emotions could be passed and experienced between oneself and another. Architecturally, this means recognizing that the use, selection, and qualities or character of materials, becomes

[160] See E. Coen's *Umberto Boccioni* (New York, Museum of Modern Art, 1988). An early illustration of this Futurist conception can be seen in the paintings by Boccioni, which showed objects and humans interpenetrating with one another.

something important to us. Our bodies are affected by being concretely in touch with materials, through which we communicate our ideas.[161] Pallasmaa defines the architectural significance of this corporeality of material and body as bodily identification. He writes: "we are in constant dialogue and interaction with the environment, to the degree that it is impossible to detach the image of the self from its spatial and situational existence."[162] We are "there," situated in the architecture, which impresses itself in a manifold way onto our bodies.[163]

These material qualities of architecture respond to the advances of the body. Pallasmaa continues, "the encounter with any work of art implies a bodily interaction," such that, "a work of art functions as another person, with whom one converses."[164] Marinetti wants both – food and art – to affect us in a profound artistic way, so as to fill our lives with joy and purpose.[165] Architecture, too, can be of similar relevance to our embodied lives.

Expense, Meaning, and Crisis

La cucina futurista was written during a grave economic crisis of the Great Depression. The populations of the industrial countries of Europe and North America experienced great hardships that drove those countries

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[161] In *Dinner of White Desire* the ten "Negroes" eat white foods that fill them with a metaphorical experience of their intangible whiteness, "the Negroes' state of mind is affected as it were unconsciously by the paleness and whiteness of all the food." They experience a bodily identification of whiteness contrasted by the reality of their black skins. *La cucina futurista*, 136.

[162] Juhani Pallasmaa, *The Eyes of the Skin*, 45.

[163] Boccioni in 1910 had expressed a similar sentiment as such: "How often have we not seen upon the cheek of the person with whom we are talking the horse which passes at the end of the street. Our bodies penetrate the sofas upon which we sit, and the sofas penetrate our bodies. The motor bus rushes into the houses which it passes, and in their turn the houses throw themselves upon the motor bus and are blended with it." Umbro Apollonio, *Futurist Manifesto*, 28.

[164] Juhani Pallasmaa, *The Eyes of the Skin*, 46.

[165] "We mean the art of self-nourishment," *La cucina futurista*, 21.

to economic collapse. Masses of workers were simply laid off, leaving many without income, food, and shelter. Marinetti indicates: "it is not by chance this work is published during a world economic crisis, which has clearly inspired a dangerous panic . . . We propose as an antidote to this panic a Futurist way of cooking, that is: optimism at the table."[166] During such a crisis, Marinetti asks his readers to create Futurist dishes using dear ingredients from Italy, but even finer foreign ingredients: Dutch cheeses, Turkish wines, Japanese nuts, African dates, and other precious materials – when the majority could not even afford bread.[167] What lay behind such a demand, and what did it mean to create dishes out of costly ingredients in a time of financial hardship?

The use of expensive ingredients to create Futurist dishes may be readily interpreted as a decedent stance by Marinetti, to satisfy a personal Dionysian gluttony. I believe however, that such an interpretation is lacking. It neglects the artistic imperative Marinetti sought in art, which would rescue us from crisis. Marinetti, was not asking his readers to choose expensive materials to act decadently, in fact the opposite. Like Nietzsche, Marinetti saw decadence as a general state of decline, which for Nietzsche was exemplified by the nineteenth century. The world during the Great Depression was in decline because of a Dionysian intoxication with money and corporate stocks. Nietzsche saw decadence as opposed to creativity in that it was a destructive act of powerlessness, a suicidal tendency that consumed mindlessly, and that reacted rather than created, (like all stock exchanges) to the forces of life. Decadence lead to feelings

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[166] Ibid., 21.

[167] "Contrary to Criticism already launched and those foreseeable, the Futurist culinary revolution described in this book has the lofty, noble and universal expedient aim of changing radically the eating habits of our race, strengthening it, dynamiting it spiritualizing it with brand-new food combinations in which experiment, intelligence and imagination will economically take place of quantity, banality, repetition and expense." Marinetti is highly critical of making based on utilitarian requirements. He tries to peel the making of food away from any notion of function,

of resentment and revenge against life. Nietzsche saw decadence as a historical fact, a negation of the world as it is in favour of a fictive world of perfection that *distorts* the world.[168]

Nietzsche felt that instead of despairing over the fact that there is no perfect world to be known, man's ability to create becomes the more meaningful activity in this world, through a 'will to power,' which he called Art. The meaning and value then, for Marinetti, of a Japanese nut is granted *only* by the cooks ability to imaginatively create from it, by shaping it, himself, and others – and not it's market price. Those multitudes of men who could only afford bread, were engaged in an act of self-preservation – they were solely interested in survival. But for Marinetti, this act of agonizing self-maintenance and subsistence on bread meant they were already in a powerless state of decline and decadence and therefore unable to fulfill their capacity for the human life of art demanded by Marinetti – they were in a sense dormant.

Using rare ingredients to create dishes was thus a vital creative artistic act, and an affirmation to overcome a status of depression by poetically transforming the world and the self. By creating Futuristic dishes from expensive ingredients – some perhaps airlifted from far away countries and placed before the cooks – Marinetti was firstly affirming his choice to do otherwise. In the face of crisis, art was proposed "as an antidote to this panic" to rescue us from our predicament. Secondly, Marinetti was refusing to use food ingredients in a purely *functional* manner, as sustenance fuel rationed to individuals to keep them alive.

Making food was not to be a functional nor a monetary matter – man's humanity was in crisis and at risk of being leveled out into monotony, left

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rationalism, or other utilitarian aims like: price, quantity, repetition which all stress pragmatism over poetics for creating food (art). My italics. La Cucina Futurista, 21.

[168] Joan Stambaugh, *The Other Nietzsche*, 15.

without its essence, the surprise or wonder so valuable to life – its importance as a rescue vehicle for humanity outweighed any monetary or pragmatic concerns.[169] In addition, the sustenance aspect of food had the connotation of acknowledging a transcendental reality. One sustains one's life until the time when redemption (by God) is at hand. This was unacceptable to Marinetti, who believed that our only choice was to creatively work our way out of our crisis through art. Besides, function implied passivity and elatedness, rather than activity and desire. A "functioning human," is always contented with the status quo, she will not dream, desire, or seek out anything, but rather accepts her idle passivity. As a result, Marinetti elevated cooking to its deserved status as an art, "we mean the art of self-nourishment," to save humanity. In the process, this affected his argument of art, which implied that art was not an extra-ordinary human luxury, but rather a vital human activity open to anyone.

The materials for making architecture are very expensive. Consequently, the use in architecture of 'prized' materials is becoming rarer today. However, if architecture is to regain those losses incurred upon it by functionalism and modernism – which taught architecture to be frugal with its materials – it must become radically more imaginative and creative in its use of materials. Architects must invent new materials, and challenge the limits of old materials, changing and twisting them in fantastic and interesting ways. The architect can challenge the engineer's techniques, with his architectural ability to create those works of architecture that are striking, playful, emotive, and surprising.

[169] In *Dinner that stopped a Suicide*, Marinetti's request for a hundred sacks of "indispensable ingredients" during a time of economic crisis, underlines his belief that to pass from crisis our efforts must be wholehearted, sincere, and total. In order to save a precious life, materials must be without monetary value other than their value to save that life - to pass from crisis.

Number and Interpretation

Once gathered, the ingredients in *La cucina futurista* would now become transformed by the recipes into artistic works. But, these recipes are strange. Unlike ordinary cookbook recipes which are presented in a formal manner, with their ingredients exacted, and their execution explained logically; the recipes in *La cucina futurista* are written in a variety of ways. Some dishes appear as traditional recipes with a list of ingredients and a description of the process, others are barely lists, in the form of poems, or diagrammatic sketches. Some are short while others are long. The ingredients are quantified but without a quantitative designation, such as litres, or tablespoons. The dishes are listed in no apparent categorical order such as beverages, main courses, or desserts. Neither are there any pictures of the dishes.

This variety of ways of communicating the recipes for making Futurist dishes makes *La cucina futurista* a unique cookbook. In a century when cookbook authors have been struggling to write *fool-proof* recipes, guarantying for their readers the perfect reproduction of the pictured item, the recipes of *La cucina futurista* seem rather unconcerned with such trivialities as measuring, quantifying, and cooking times, or even the actual end product.

I believe that these recipes should not be read as simple *how-to* instructions to make a dish. Certainly one could make these dishes. However, as detailed as they are, these Futurist dishes question their own possible realization. Making these dishes would have been equivalent to having missed the point entirely about why they were "written." Even in the introduction to the translation of *La cucina futurista*, Lesley Chamberlain explains: "I have to confess though that the first time I

approached Marinetti's work I took it for a cookbook. It was only when I made some of the food that I began to see its poetic appeal."

It was not important to the Marinetti that one strictly follow the recipes.[170] For the him, the process of making was an artistic poetic process of fabrication, not a step-by-step procedure to be followed, and then rewarded in the end with the appearance of an *art work*. Art could not to be reduced to recipes. Furthermore, we must recall the Futurists' insistence on "absolute originality in the food."[171] This call for originality was an invitation to create one's own dishes, and to express these works to others. Originality for the Futurists meant that something had to be manipulated by its creator in a way that is particular, to produce a personal interpretation.

Thus it is clear that the vague quantities for ingredients were purposely so to stimulate the imagination by allowing it to be free in its interpretation of the recipes. For Marinetti these ambiguous recipes were a metaphor of a non-transcendental life, a life which he saw as a series of unexpected adventures, mistakes, failures and successes. He believed that no one can give the other an accurate recipe (blueprint) for life, because that recipe simply cannot be guaranteed. In her translation Brill reminds the reader that: "fortuitous mistakes often lead to new dishes," which is why the recipes are vague.[172] The recipes are as poems – open to a free and creative interpretation, rather than a systematic, rational, procedural diagram termed as *fool-proof* and stressing surety, or compliance.

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[170] While the Futurist Banquets were real, the dishes of the banquets were the Futurists' own interpretations of their dishes. In making the dishes even the cooks at the *Holy Palate Restaurant* allowed themselves to liberally interpret the dishes. *La cucina futurista*, 65.

[171] Ibid., 38.

[172] For instance, in *Decisone* four ingredients are gathered. It is true that when combined, the four quantities become quarters of a whole. However, Marinetti does not indicate a ¼ of what. The four quarters form a whole, but just what kind of whole is formed? Ibid., 142.

More important than physically making the dishes was the recipes' gravitational pull, to attract and capture the reader's imagination with the recipe's narrative, the poetic imagery and juxtapositions of the ingredients, and the recipes capability to incite a poetic analogy. The eighty-nine recipes of *La cucina futurista* are little stories or poems made from food ingredients. Each recipe tells of alchemical combinations, potions, elixirs, and magical pharmaceutical foods which promise surprise, imagination, and joy. The recipes are collages that bring together "quite disparate and unconnected things" for the sake of surprising richness.[173] The juxtaposition of strawberries and breasts in a recipe by the poet Farfa called *Strawberry Breasts*, provides a good example of the ability of these recipes to induce a concrete poetic analogy. Here Farfa evokes the sensual reality of "two erect feminine breasts."[174] Symbolized and characterized as strawberries, they recall our real experience of women's breasts, their taste and texture supple with the sweetness of their pink femininity. Here the poetic image is given depth with a grafting of the visual image with an oral image of sensual erotic taste.

There are two points here that are of significance to architecture. The first, concerns the dependence of the profession on number, precisely accurate numbers, to qualify the sizes and meanings of spaces. Whether as maximums, minimums, or golden rules, codified architectural standards are a hindrance to personal expression. When Marinetti uses vague quantities he affords the reader an opportunity for a manifold interpretation of the recipes. Although the architect would find it difficult to use vague quantities, he may regard all architectural standards as vague quantities in themselves, thereby facilitating a personal interpretation of them,

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[173] Marjorie Perloff in *The Futurist Moment*, 45. See chapter 2 where Perloff compares and argues the uniqueness and originality of the Futurist collage, and juxtapositions with other collage methods of the period.
[174] *La cucina futurista*, 156.

according to the case in hand. The architect should translate particular standards to suit specific needs.

And, analogous to the poetic recipes of *La cucina futurista* poetic richness is reason enough to design seemingly 'unbuildable' projects as an ethical exercise for the pursuit of a creative imagination that presents an ulterior way of being, and because there is "something to say." Based on that premise a case may be argued for using computers as a means of inventing and exploring creatively architectures that may be unbuildable. As an artist in his own right, the architect has a duty to dream up fictions, a metaphorical architecture that may be either buildable or question the possibility of its own realization.[175]

The architect today can open up the profession to imagination and creativity for better alternative solutions to man's modern creative crisis. Put more eloquently: "While construction as a technological process is prosaic—deriving directly from a mathematical equation, a functional diagram, or a rule of formal combinations—architecture is poetic, necessarily an abstract order but in itself a metaphor emerging from a vision of the world and Being."[176]

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[175] See the *Function of the Cook* in chapter 1.

[176] Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science*. (Cambridge, Massachusetts: The MIT Press, 1983), 326.

CONCLUSION

Marinetti is still regarded as a menacing bellicose figure by those who dislike Futurism. The story of Futurism as been conveniently, but unfairly, summed up with Fascism, and Marinetti conveniently pigeonholed as a warring Fascist.[177] To copy Marinetti's life 'recipes' and live out our lives as he did, would certainly conflict with his own philosophy which demanded a high degree of creative originality. However, to throw Marinetti into history's oblivion would deprive us of the essential truths he had espoused about the nature of art, in works such as *La cucina futurista*.

La cucina futurista was chosen for this thesis as a fair-sized portal from which we may enter through and examine the Futurist imagination – relating the creative metaphor in the text to the vision and practice of architecture today. Marinetti wrote *La cucina futurista* in a time of crisis, and it is in a time of continuing crisis that we have resurrected and revisited this neglected text as a source for inspiring alternative. It is Marinetti's consistent insistence on the primacy of the imagination that we find appealing. Through a seemingly innocent discussion on making modern foods, Marinetti is hammering at a larger idea that seeks to find, or make a way, out of the panic – created from the loss of the universal plan.

This cookbook has shown us that making food and art, and making architecture, are all forms of making that should be undertaken as poetic

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[177] "The relationship between Futurism and Fascism has caused embarrassment to generations of historians. For formalist art historians it has been an excuse to pass over the political side and concentrate on Futurism as simply an art movement, a poor and provincial second-cousin of Cubism, concluding perhaps with a description of a prematurely cretinized Marinetti suddenly compromising on his early anti-academic stance by accepting a position in Mussolini's Academy of Italy. Other critics taking their lead from the passage quoted by Walter Benjamin quoted on P.17, have presented an equally distorted picture, refusing to fill in the grey areas in a black-and-white 1930s description of 'bad' Fascist art aestheticizing politics, and 'good' Communist art politicizing art." (qtd. Angelo Bozzolla and Caroline Tisdall, *Futurism*, 200).

exercises, that emphasize the artful poetic nature of the human condition – over that of the rational and the logical. All these forms of making should be about rediscovering the "poiesis dimension"[178] which is so particular to humans. The cookbook had emphasized that our works of food, art, and architecture are made not as intellectual fodder for an elite to critique. Rather, we make these ephemeral works as gifts to the other who takes the experience in through the body, enriching her senses and elevating her spirit. For that other, these works must ignite her imagination, revealing, reminding, and re-founding his capacity for wonder, surprise, dreaming, participation, and caring, thereby fulfilling her potential to live and dwell a joyful human life.

Marinetti's cookbook, and his Futurism, had insisted that any work of art today must be able to capture our imaginations, leading us to think, see, and experience differently what was presented there to us. The work of art or architecture should embody its own gravitational pull to capture our sensibilities, drawing and moving those sensibilities around it, so that we may participate in that very bodily experience of art. The experience of architecture is a bodily experience like that experience of eating. Both experiences impress upon our bodies the surprises of their encounter. Marinetti's message to us, is that we must learn to resort to our imagination, to travel and play with it, to make from it, and finally to share whatever semblance of being it may reveal.

For architects, the text illustrates that we are at a point in time which is like no other. If architecture is to be saved from the fruitless notions of rationalism, and functionalism, or gratuitous formalism, that have limited the scope of our profession, then it is to Art – and its ingredients of imagination, surprise, play, motion, tactility, and festival –

[178] Richard Kearney, *The Wake of Imagination*, 367.

that we must resort to, to open up and dilute the professional boundaries that have been instituted around architecture.

La cucina futurista is thus a call to resistance for all those who make. For architects, it reveals that we must be critical of the methods we use to imagine, communicate, and create architecture. That we should not be contented with the official *fool-proof* 'recipes' passed down to us, but rather, we have a duty to construct and communicate our own recipes, so that they may resonate poetically to the other. Resistance should also include a resistance to the professional tendency for unnecessary complex planning or idealism, with improvisation, spontaneity, and surprise. Both, the work of food and the work of architecture, are important to our overall sense of being in the world. They plant our bodies in this world by connecting us to the world, and the people about us. They are important precisely because they are anchoring moments in or lives, that refer to our consciousness of place.

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Il Sacro Bosco d' Amore:
Communication through Desire

Julie Althoff, Department of Architecture, McGill University, Montréal, November 1999.
A thesis submitted to the Faculty of Graduate Studies and Research
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Master of Architecture (History and Theory).

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ABSTRACT

Il Sacro Bosco in Bomarzo is an experience in Lessons on Love. The statues are a constant repetition of the paradox of Eros. The exoteric meaning of the statues will be given through the narratives that influenced them. Then, the esoteric meaning behind the narratives and the statues will be given with the help of Ficino's *Commentary on Plato's Symposium on Love*. Because the garden exists in the space of desire, it is able to speak to us today. This thesis is a walk through the garden. It is only through the experience of the garden that architectural meaning is conveyed. The garden is a journey that will heal the body and the soul through the spirit. *Il Sacro Bosco* leads to a better understanding of the self and, in the Renaissance, its connection to the One.

RÉSUMÉ

Il Sacro Bosco, situé à Bomarzo, c'est une expérience dans les Leçons de l'Amour. Les statues sont en fait de constantes répétitions du paradoxe d'Éros. La signification exotérique des statues sera spécifiée à travers les récits qui les ont influencées. Dès lors, la signification ésotérique des statues et des récits sera donnée avec l'aide du *Commentaire de Ficino à propos du Symposium sur l'Amour de Platon*. C'est parce que le jardin existe dans l'espace du désir qu'il peut nous parler aujourd'hui. Cette thèse est une promenade dans le jardin. Ce n'est qu'à travers l'expérience du jardin que la signification architecturale peut être exprimée. Le jardin, c'est le voyage qui, à travers l'esprit, soigne et guérit l'âme et le corps. *Il Sacro Bosco* nous guide vers une meilleure compréhension du Soi et, dans la Reanaissance, son lien avec le sacré.

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Drawing By Julie Althoff

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"But for us existence is still enchanted. It's still
Beginning in a hundred places. A playing
of our powers no one can touch and not kneel to and marvel.

Faced with the unutterable, words still disintegrate...
And ever new, out of the most quivering
stones, music builds her divine house in useless space."[1]

It is between the words where silence reigns. "'Poetry grows out of silence and thrusts for silence'...The silence of art is not mere absence of sound, but an independent sensory and mental state, an observing, listening and knowing silence."[2] It is in this silence, between the words, where we contemplate meaning. Meaning resides in the silence of poetry, but where does meaning reside in architecture? Can architecture be poetic for us today when its significance is no longer evident?

This thesis is searching for a strategy to recover architectural meaning. Architecture 'means' when it overwhelms us, leaves us in awe. The everyday drops away. We transcend our world leaving behind the differences, the pluralities and the work speaks to us. A world is opened up to us and we gain a better understanding of ourselves in front of the work. Communication is an essential part of meaningful architecture. There is a connection between the participant and the work. Architecture does not 'mean' without this connection, without communication.

Communication is an exchange; part of its Latin root is *communis*, or common. For an exchange to occur there has to be a link between the people communicating, a shared experience, a common ground. But, Modernity has ended. According to some contemporary philosophers, we live in a world of pluralities; many truths and many histories, without just one Universal. However, the acceptance of these pluralities problematizes communication since it destabilizes the link of communication, the common ground. We have been left with many common grounds, but we must remember that it is not communication between me, the designer, and the participant. It is communication between the work and the participant. We must ask ourselves as designers – is it possible for our designs to communicate to people, to 'touch' them, leave them in awe, while still celebrating the differences? I am not suggesting a nostalgic return to an acceptance of the universal; I am searching for a new strategy for architectural meaning.

As a designer I cannot dictate participation, I can only allow for it. But in order to allow for it, something that begins communication is required. We need a link that will acknowledge the differences, yet still allow for a shared experience. I want the possibility to create an architecture that 'means', but not for one person or even for one group. In order for it to celebrate everyone, it must find a common thread. What connects all of us? We are human; we have bodies, we have flesh, we have senses.

But architectural meaning is more than the senses; it involves desire. Architectural meaning cannot be grasped on a fully intellectual basis; it originates in the erotic. Desire is more than the mind alone, it is of the body. Meaningful architecture is also of the body. Our entire body is within the work, not merely observing it from afar. Architecture, by its very nature, embodies desire. It takes hold of us, wrapping us within its walls. Our consciousness turns within and we gain a heightened sense of being. We have all felt desire, where fulfillment is never fully present, nor fully absent. When experienced, meaningful architecture can have the same effect on us. It can open up a world to us.[3]

When I first visited *Il Sacro Bosco* it was overwhelming. It is a mysterious grouping of statues hidden in a valley, and it haunted me. Years later I was able to return to it with this thesis asking what was it that 'touched' me? By studying the narratives attributed to Orsini Vicino's statues I discovered that they all revolve around the theme of love and desire. The garden is situated in the space of desire. This is one possibility of what touches the visitor to *Il Sacro Bosco*. We feel the tension between the statues, between the terraces. We want our questions to be resolved, but *not yet*.[4] It is an uncomfortableness in our stomachs, in our throats, and a numbness in our fingers, but we welcome it.

Because it is only through the experience of the garden that meaning is revealed, this thesis will take the reader on a walk through the garden. It will explain the connections of the statues to the theme of eros (love and desire) through the narratives that influenced them. After the introduction, giving the context and a brief history of the garden, the thesis is divided into the four different terraces. In the first terrace we learn that pleasure is a noble passion, with Earthly Love as the beginning of a path to an understanding of the Divine. In the second terrace we learn that we are constantly seeking our other half, and if love is not returned, it can lead to madness. It is best to reside somewhere between venereal and contemplative activity. One of the important lessons of the third terrace is the eternal nature

of love. It is a link in the universe and it is constant and timeless. The thesis concludes on the fourth terrace with the Temple of Divine Love. This is where the many is resolved in the One. Our questions are answered, our desire is quenched.

This thesis is not suggesting that there is only one solution to recover architectural meaning. It merely suggests the possibility that despite a five hundred year difference, the garden still works on a powerful level today. Desire is fundamental; it is timeless. This thesis examines one way desire was instilled in a design. It suggests a way for us to open our work to participation, to recover architectural meaning.

I will begin by taking you through the sequence of experiences in Bomarzo on the way to *Il Sacro Bosco*. The bus from Viterbo stops at the top of the mountain and we walk down the winding road along the side of the mountain. On our left is a rock cliff towering above the narrow road. The right side looks out over the valley of terraced olive groves. The cliff on the left slowly gives way to houses with the town of Bomarzo running along the ridge of the mountain. The entire road is encroached upon by small houses, their front steps reaching into the narrow street. The road forks at a small church. The road on the left ascends with old stone houses looming over the road, darkening the streets. It becomes colder entering into the shadowed town. We see the Orsini Castle, a huge fortress at the top of the town. The road rises to the castle, then a path leads down ramped moss-covered stairs between buildings. We take this path, careful of the loose stones. The path eventually descends along the paved road into the valley, away from the town and the castle. As we walk through the gravel parking lot, past the newly built tourist entrance, along the gravel walk, we listen to the sound of our steps on different surfaces. The path is gradually enclosed with the awnings of the trees and finally we step into the woods, *Il Sacro Bosco*. We feel as if we are in a dream and have discovered a forgotten secret.

Il Sacro Bosco was built in the valley below the castle of Bomarzo in 1552 by Pier Franceso 'Vicino' Orsini. It is a garden filled with huge monstrous and erotic statues, a garden surrounded by mystery. Who designed it, why was it built, and why was it forgotten only to be rediscovered in the early part of the 20th century? Many historians have attempted to answer these questions by studying Vicino Orsini's personal letters and attributing the statues to popular narratives of the time, but it has resulted in little more than speculation. Francesco Colonna's *Hypnerotomachia Poliphili* and Ludovico Ariosto's *Orlando Furioso* are the two main narratives that could have influenced the statues, but neither addresses all of the statues. Moreover, antecedent narratives cannot address the transcendence of the unique work of art, the unity of which rises above its origin and speaks to us today.

Unlike Vicino Orsini's neighbors and friends, Gianfrancesco Gambara at Villa Lante and Alessandro Farnese at his Palazzo in Caprarola, *Il Sacro Bosco* is not the typical formal Italian Renaissance Garden. Most gardens of the time were directly connected to the primary residence, villa or hunting lodge, and built along the slope down from the building. The gardens were organized along a main axis with secondary axes separating the rooms of the garden. Texts of the time stress that the order in the garden must be visible from a high

spot.[1] "...The visible world corresponds with the divinely created cosmos; the microcosm reflects the macrocosm. To know this world is therefore also to know God...Nature was also conceived as ordered, a reflection of a cosmic order; and in imitating nature, art must imitate not only nature's outward appearance, but also its underlying order."[2] In contrast to the panotpical villa that upholds the illusion of control, *Il Sacro Bosco* is built in a valley, with no direct connection to the Orsini Castle (fig.1 & 2)[3], and the entire organization of the garden cannot be seen from any one place. In fact the only element that can be seen from the castle today is the temple. The garden consists of four terraces, roughly perpendicular to each other. Although there is a sequential hierarchy in the different terraces, entering at the lowest terrace ascending to the highest terrace, there is not a specific sequence within each terrace. Of course, the plant groupings have changed over the years, which may have affected the sequencing of the terraces or the allowable views, but based on the built forms (statues, stairs and terrace walls), at no point in time was there only one way to experience the garden. There would always have to be backtracking to see all of the statues and choices to make in which path to follow. Claudia Lazzaro says there is not a narrative progression through the wood because this contradicts the design which requires choices and offers no clear itinerary.[4] Nonetheless, the experience of the garden today begs a narrative interpretation, but not from one single literary source. Walking through the garden, a story starts to emerge. The first statue may relate to the second statue, but as the narrative develops, a third statue may not relate to the story; a new narrative emerges. The first story may pick up again on another terrace, or a story may end. Some statues might relate to two or three different stories at once. Despite the many narratives, the discordance, there is a unity felt in the garden especially after reaching the temple on the last terrace. "...There is no single itinerary, although the temple at the top would seem to be the goal."[5]



Figure 1. Orsini Castle as seen from *Il Sacro Bosco*. Photo by author.

So what is this unity that speaks to us bringing all of the statues together, despite the different narratives involved? Maybe by exploring why the garden was built and how Vicino Orsini used the garden, we can begin to answer these questions. Once again there is no strong physical evidence of the original program of the garden. Clues to the mystery come

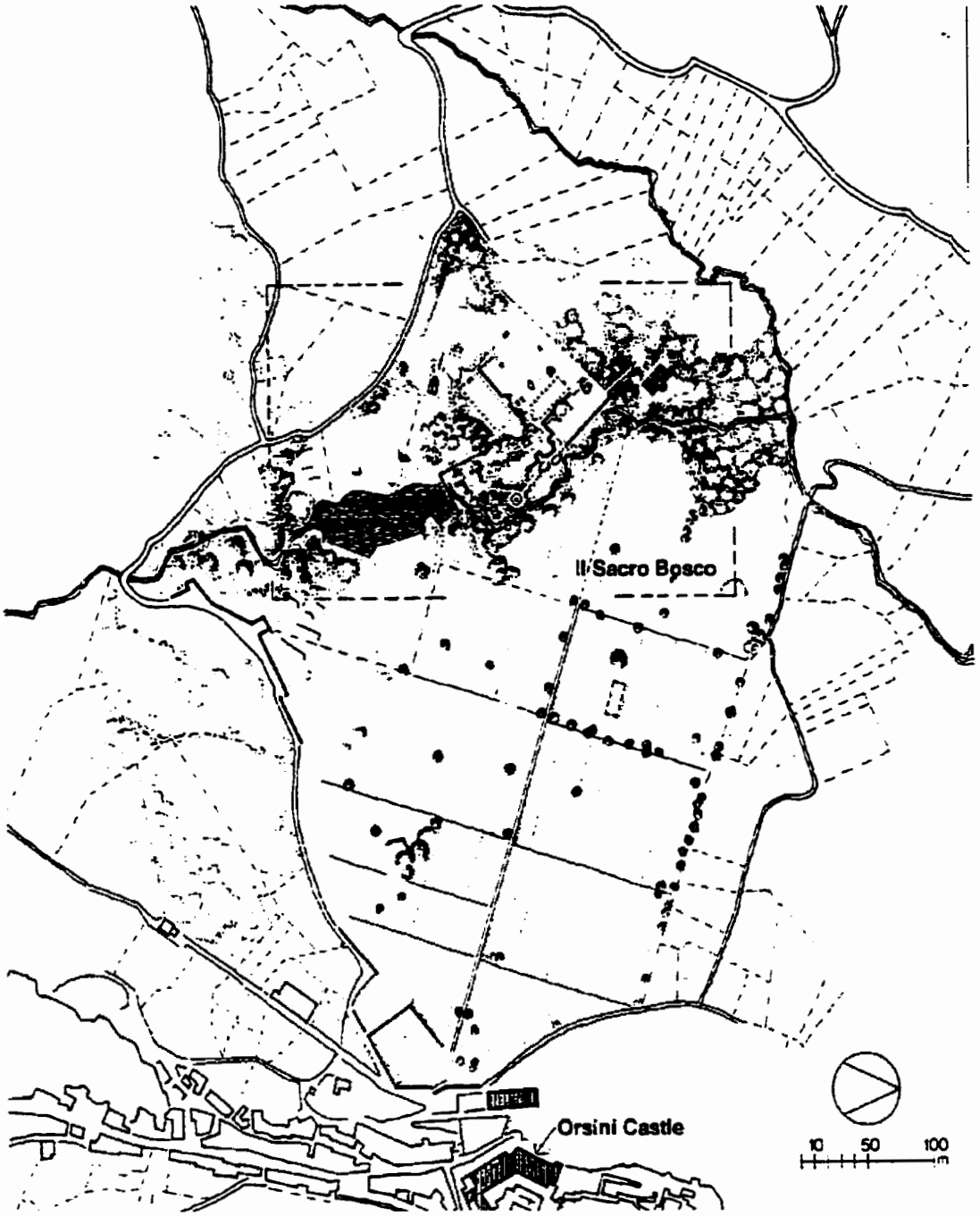


Figure 2. The Town and Garden of Bomarzo. Image taken from Horst Bredekamp's *Vicino Orsini und der heilege Wald non Bomarzo: ein Furst als Kunstler und Anarchist*, 2 vols., Worms, 1985.

from Vicino Orsini's personal letters and books published during his lifetime. Born in 1513, he was among an elite group of writers and artists which included Giuseppe Betussi (who praised him for his physical and intellectual beauty in a love treatise entitled *Il Raverta* in 1543), Annibale Caro, Ludovico Domenici, Bernard and Torquato Tasso and Francesco Sansovino.

During his lifetime Vicino Orsini was a soldier and a vassal for Pope Paul III and the Farnese Family. Almost half of the 140 letters presently located were addressed to the Farnese Cardinals-Alessandro and Octavio.[6] Most of these letters deal with issues of money, family and land; however, a letter addressed to Alessandro Farnese in 1561 mentions that Vicino had been held up in bed because he fell during the building of the dam for the artificial lake. In 1544 he married Giulia Farnese. He was a prisoner of war in Flanders for 18 months between 1553 and 1554. It was in the same war at Hesdin that Giulia's cousin Orazio Farnese died.[7] In 1557, Vicino retired from military duty. It is thought to have been around this time that his wife Giulia died, but a record has not been found to verify the date of her death.

The other half of Vicino Orsini's letters presently located were addressed to his friend Giovanni Drouet. Giovanni Drouet was an under-secretary to Cardinal Matteo Contarelli of Rome and according to Arnaldo Bruschi, he was also a dilettante of medicine and maybe even an amateur alchemist.[8] Drouet would send Vicino the latest books from Rome in exchange for the fruits of his land, including wine, honey, vegetables, and fowl. Their correspondence is extensive and covers everything from menial matters of the home to curative recipes to prolong life. In letters at the beginning of 1576, Vicino tells Drouet that he is having trouble locating a new cask in order to send him the wines of his land. There is no evidence of a vineyard or orchard inside the grove, but it is possible that one existed on the slope between the castle and the grove.[9] On several occasions Giovanni Drouet sent Vicino prescriptions and curative herbs. It is possible that a garden of simples (flowers and herbs) was located inside the grove on the third terrace, referred to as the Hippodrome by some authors.[10] In 1604 Giovanni Guerra visited and made drawings of *Il Sacro Bosco* among other gardens. On the third terrace he delineated two formal rectangles, much in the same way he drew the planting beds at Villa Lante. Villa Lante is one of the most well researched gardens in Italy and there is evidence that the beds Guerra drew at Villa Lante contained the garden of simples. So, it is possible that the beds Guerra delineated on the

third terrace at *Il Sacro Bosco* also contained Vicino's exotic flower and herb collection mentioned by several authors. However, as Claudia Lazzaro points out, an exotic plant collection is not rare during this time. The first botanical garden was established in Pisa in 1543, and many new plants were entering Italy from Spain, Mexico, the Indies, and Holland. At any rate, Vicino Orsini seemingly gained great joy in reaping the benefits of his land and bestowing them on his friends in the form of goods and on himself in the form of curative recipes.

As mentioned above, some books were published during Vicino Orsini's lifetime that also mention his garden at Bomarzo. J.B. Bury has published some excellent research on literary references to Bomarzo in the *Journal of Garden History*. In 1575, Vicino's friend Francesco Sansovino wrote *Ritratto delle piú nobili et famose cittá d'Italia*. J.B. Bury translates,

> Viterbo...is located in a beautiful and spacious territory...and there are in it various fortified places [castella] among which Bomarzo, owned by Vicino Orsini, is worthy of notice. Below the castle this Lord has built theatres, loggias, rooms and temples in the antique style, dedicating them to the name of Giulia Farnese his late wife, at such great expense that it is an overwhelming experience to see them.[11]

In 1578 Francesco Sansovino edited a copy of Jacopo Sannazaro's *Arcadia* printed by Giovanni Varisco (Venice, 1578). Sansovino dedicated it to Vicino,

> To the most illustrious Lord, Vicino Orsini.
> My lord, when I think of your most beautiful estate of Bomarzo I am unable to refrain from sighing, because it pleased me so much when I was there that I dare to say that none of the Lords of the House of Orsini owns a more charming and delightful place than yours. I feel as if I were up in that loggia which gives a view of the whole countryside and leads the observer's eye down to that hill at the foot of which are to be seen the theatre, the lake and the temple dedicated to the happy memory of the most illustrious Lady Giulia Farnese, your former consort. All these things, made at great expense and with marvelous judgment, cause me the highest degree of longing: longing, I mean, to see those sights again whenever that may be, and all the more because, reading the present volume, I have found within it some descriptions of hills and valleys which, recalling Bomarzo, have caused me the greatest longing for it...
> Your sincere friend and servant, Francesco Sansovino.[12]

And, again in 1582 in Sansovino's *Della origine et de'fatti delle famiglie illustri d'Italia*, he wrote,

> Giulia Farnese was the former wife of Vicino Orsini, who, loving that most discreet and noble-minded lady, dedicated to her at Bomarzo a most beautiful temple, built by him from its foundations, in which temple it has been arranged for priests to pray to Our Lord continuously for her soul.[13]

As J.B. Bury points out, all of these were published during Vicino Orsini's lifetime so he presumably read them. Also Francesco Sansovino was the historian of the Orsini Family writing *L'historia di casa Orsini* (Venice: Nicolo Bevilacqua, 1565), so it can be assumed that his knowledge of the temple dedicated to Vicino Orsini's late wife, Giulia Farnese, is reliable. As for the "great expense" of the garden, it is not necessarily a monetary expense. Elaborate gardens were not uncommon at the time, as seen from Vicino Orsini's friends at Villa Lante and Caprarola. The "great expense" could be referring to the loss of his beloved wife.

The temple and possibly all of *Il Sacro Bosco* is a memorial garden dedicated to Vicino Orsini's wife Giulia Farnese, and it is used as a pleasure garden inspiring solitary reverence as in the setting of Sannazaro's *Arcadia*. "That the wood was also conceived and used for pleasure is made emphatically clear by the images and objects carved out of the living rock, by the inscriptions, and by comments in letters."[14] Claudia Lazzaro also mentions that in the 16th century there was no distinction between a pleasure and a use garden. The fact that Vicino cultivated the land and grew herbs and flowers for curative prescriptions does not diminish the fact that he also gained great joy in silent contemplation. He also took pleasure in the constant building of the statues. Even toward the end of his life, when the building was complete, he painted the statues "red, blue, green, and yellow...enhancing their extravagant and supernatural character."[15]

So once again how does this help explain how the unity of the 500 year old garden is able to speak to us today? Although the program of the garden and how it was used is important, the statues and inscriptions that accompany them are equally important. In order to study the statues, many authors have looked to the popular literature of the time to explain the iconography and meaning of the statues.

Margaretta J. Darnall and Mark S. Weil have written one of the most comprehensive articles on the statues of Bomarzo. They contend that the garden is structured on Dante's *Divine Comedy* "where the path leads down into a false paradise before ascending to a Temple of

Divine Love." The inscriptions also refer to Petrarch and Lodovico Ariosto. "Petrarch's search for Divine Love in his Lyric Poems centres on Laura, her death, and his mourning which ultimately leads him to understand true Love. The garden deals with the Petrarchian theme, but uses Ariosto's *Orlando Furioso* as a vehicle for its narrative."[16] Like Dante's search for Paradise and Petrarch's search for love, the story of *Orlando Furioso* is also about the search for lost love, a paradise. God gave Orlando superhuman powers so that he could save Christian Europe from the Moors of Spain and Africa. Orlando falls in love with Angelica, but his love is not returned. Orlando forgets his divine mission and chases Angelica all over Europe. She eventually marries a soldier, and they wander around Europe carving their initials and inscriptions of their love into trees and rocks. Orlando sees one of these inscriptions in a cave and goes mad. He wanders aimlessly killing men and beasts and eating raw flesh.[17]

Another popular narrative of the time is Francesco Colonna's *Hypnerotomachia Poliphili*, where the main character Poliphilo is searching for Polia, his beloved. It is the story of the "strife of love in a dream." Beginning in a dark forest, the story takes us through many things Poliphilo encounters in his search. He describes with great detail a pyramid, ruins of classical buildings, and statues including Pegasus, an elephant, and a hollow colossus. Along the way he meets the five senses in the form of five nymphs. They make him choose one of three doors. Poliphilo rejects vita contemplativa and vita activa to choose the middle door of vita voluptuaria, "a life of desire where fulfillment is never fully present nor fully absent."[18] Poliphilo and Polia are reunited but do not yet recognize each other. After processions of chariots, they acknowledge their love for each other at a great temple. Then, Cupid takes them to the island of Cytherea. Eventually the nymphs ask Polia to tell the story of her love which comprises the second book.

As mentioned above, there is not one sequential path through the garden. No single narrative explains all of the statues. The temple, and possibly the entire garden, was dedicated to Vicino Orsini's wife, Giulia Farnese. By looking closely at various interpretations of the garden and what they have in common with each other, the underlying theme of the garden emerges. This theme is the unity through which the garden 'speaks' to us even today. It is what leaves us in awe. This theme is Eros.

"...Love may rightly be called the eternal knot and link of the world, and the imovable

support of its parts , and the firm foundation of the whole machine."[19] All of the narratives deal with the search for love: Petrarch mourning the loss of Laura; Orlando going mad because of the unreturned love of Angelica; Poliphilo's search for his beloved Polia; and even Dante's search for the Divine Love of Paradise. Although there is not a narrative sequence to the garden, there is a hierarchical sequence with the temple as the ultimate goal. The temple on the fourth terrace represents Divine Love. The statues on the other terraces are a constant repetition of different lessons on love. They are what one must experience to reach Divine Love, to have an understanding of Divine Love. "Love is the ascending process to God in the hierarchy of the universe."[20] "Because the ordered microcosm reflects the macrocosm, the garden was the ideal vehicle to acquire knowledge of divine order, a step by step process since all things in the visible world were understood as links in a chain leading to the Divine."[21]

Although there is not a direct connection between Marsilio Ficino and Vicino Orsini (Ficino died fifty-three years before Vicino Orsini began the construction of the garden), Ficino's *Commentary on Plato's Symposium on Love* will help describe the garden's deeper connection with the theme of eros as understood in 16th century Italy. Ficino's *Commentary* is not a direct translation, but more of a vehicle for Ficino's own treatise on Love, using a compilation of ideas on Love. It is given in the form of seven speeches translated by different guests at a fictional banquet. Like many productions of art in the Renaissance, it could be read by the general public on one level as the story of a dinner; however, a select few could understand its deeper intention as a love treatise defending human love as part of the cosmic hierarchy. It was first published in Latin in 1484, then an Italian version was published in 1544. Again, there is not a direct connection to Vicino Orsini, but it is interesting to note that in Sears Jayne's Introduction to his translation, he lists Love Treatises that were influenced by Ficino's *Commentary*, two of which were by Vicino Orsini's friends previously mentioned: Giuseppe Betussi's *Il Raverta*, and Francesco Sansovino's *Ragionamento*.[22]

In Marsilio Ficino's *Commentary*, love is defined as the desire for beauty.[23] "The Greek word *eros* denotes 'want', 'lack', 'desire for what it missing'."[24] Bomarzo is in a constant state of desire. It is a memorial to his lost love, appropriately shown through the iconography of popular love stories of the time; "Eros is the weaver of fictions."[25] *Il Sacro Bosco* speaks to us through love, through desire. Desire exists in the space between the lover and beloved. It is the origin of meaning. "Aristotle established an analogy between eros and

knowing, claiming that men, by their nature, reach out to know, both deriving delight from reaching and pain from always falling short."[26] We feel desire with our entire body. It is in our mind and in our toes. But, our post-Cartesian split of mind and body has privileged the mind to such an extent that even the process of designing today rarely addresses the body in a place. Rather, it addresses a reductive, calculative space understood intellectually, not sensually. "Architectural meaning, like erotic knowledge, is primarily of the body and happens in the world, in that pre-reflective ground of existence where reality is first 'given'..."[27] It is only through the experience of the garden that meaning reveals itself. In the Renaissance, the body was considered a prison of the soul. The soul was still privileged in the hierarchy to God, but it was still connected to the body. Therefore, earthly desires were considered the beginning of the path to the perception of the divinity. Earthly desires were not bad in themselves, only when abused.

Knowledge comes through the senses to the soul. In other words, knowledge in the Renaissance was thought not to be generated in the mind alone, it was directly influenced by the persons's surroundings. The statues of the first three terraces in *Il Sacro Bosco* must be experienced before reaching the temple on the last terrace, Divine Love. The garden still speaks of the unity of Divine Love to us today because despite the postmodern breakdown of the universal and our post-Cartesian separation of mind and body, we still gain knowledge not only through our mind but also through our senses. *Il Sacro Bosco* exists in the space between the lover and the beloved. The space of desire where imagination thrives is in a constant state of tension. We want what we do not have, what we can only imagine. But once we have it, it becomes reality, and desire is gone. We are given clues to *Il Sacro Bosco's* position through the different narratives – all searching for love. And, as a participant in the garden and in the narratives, we want the main character to find love. But, *not yet* [28], because our walk through the garden would conclude and the story would end. As in all of the narratives, the search for love is never fulfilled, or only resolved at the end. The last terrace, as Divine Love, ties the entire garden together.

As I mentioned before, the Renaissance believed their art, architecture, and gardens should be a reflection of the order inherent in the cosmos. But this produced a space of tension where opposites must be resolved, must come together in the Supreme One. 'Discordia concurs.' A dominant consonance must emerge from a variety of discords.[29] *Il Sacro Bosco* exists in the space of desire, the space of erotic tension, only to come together at the end, in

the Temple of Divine Love. The Temple is the link between Heaven and Earth. The garden is not merely a built narrative, but a model for the universe. The garden, *paradeisos*, is a return to paradise; it is what allows individuals to transcend their daily lives to come closer to the One. The experience of the garden, our interaction with *Il Sacro Bosco*, is what allows us to learn and work through the paradox of love. This thesis will take the reader through the terraces of the garden (fig. 3) explaining the different statues' deeper connection with Eros.

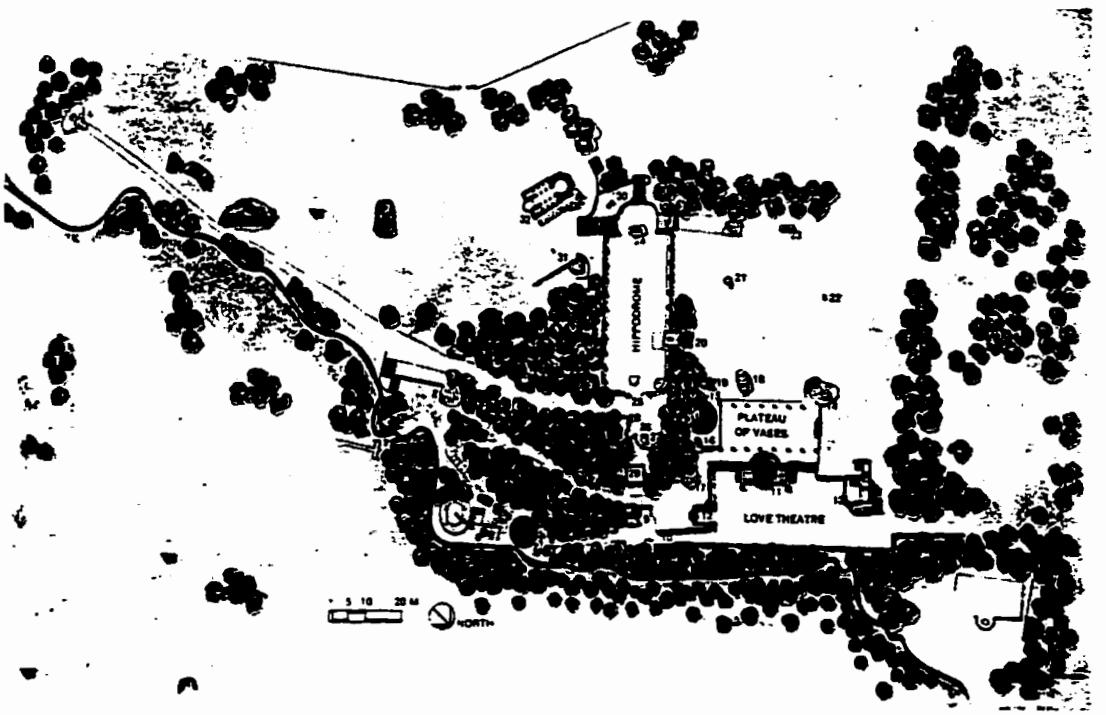


Figure 3. Plan of *Il Sacro Bosco*. Drawing by David Woods. Taken from Darnall and Weil, "Il sacro bosco di Bomarzo: Its 16th century literary and antiquarian context", *Journal of Garden History*, Vol. 4 no.1, (1984)

The sphynxes (fig. 4) previously framed the entrance at the leaning house.[1] The sphynx on the left reads,

CHI CON CIGLIA INARCATE
ET LABRA STRETTE
NON VA PER QUESTO LOCO
MANCO AMMIRA
LA FAMOSE DEL MONDO
MOLI SETTE[2]
"He who does not visit this
place with raised eyebrows
and tight lips will fail to admire
the seven wonders of
the world."(Darnall and Weil, 34)[3]

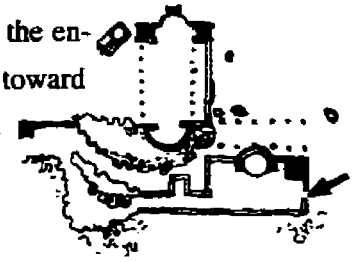

Figure 4. Sphynx. Photo by author.

The sphynx on the right reads,

TV CH'ENTRIQVA PON MENTE PARTE A PARTE
ET DIMMI POI SE TANTE MARAVIGLIE
SIE N FATTE PER INGANNO O PVR PER ARTE
"You who enter here, put your mind to it
and tell me later whether so many marvels
were made for deceit or only for art."(Darnall and Weil, 36)

Besides declaring the uniqueness of the garden by comparing it to the seven wonders of the world, the sphynx on the left tells us to heighten our senses. With raised eyebrows, our eyes are opened wider, and with tight lips, we cannot speak. We are forced to listen to the garden. And, what does *Il Sacro Bosco* have to say to us? Presently, we can only hear the wind rustling through the trees over our heads and the faint tricklings of a stream in the distance. I imagine the garden will 'speak' to us on many different levels as we walk through it. As the sphynx on the right suggests, it is impossible to answer whether the garden is made for deceit or for art without first experiencing the garden. An initial response might be that the garden was made for art. But, we must ask why all of the mystery surrounding the garden? Who designed it and what was the original program? Why are narratives started only to come to a dead end, changing and sometimes continuing later in the garden? As suggested by the sphynx, we should wait until later to answer whether the garden is made for deceit or for art.

Upon entering the garden, the Leaning House is directly on our right, with the Love Theatre beside it. The grotto of Venus is in the distance, facing the entrance and perpendicular to the other structures. The house is leaning toward the second terrace. There are stairs leading to the second terrace beside



the house, but we choose to explore the statues on the first terrace before ascending. The lower part of the Leaning House (fig. 5) is carved from one boulder, and the upper part consists of stone masonry.[4] The house has the Orsini coat of arms and two inscriptions carved into it. One inscription reads,

ANIMVS
QVIE SCENDO
FIT PRVDENTIOR
ERGO
"The soul in repose becomes wiser."[5]



Figure 5. Leaning House. Photo by author.

The other inscription attributes the first to Vicino Orsini's friend Cardinal Madruzzo who has a garden near Bomarzo in Soriano. This quote leads many to believe that *Il Sacro Bosco* was a contemplation garden. In fact, place represents a necessary dimension to thought itself. It has the potential to carry people into realms unknown in their daily experience. In talking about how the thinking mind engages the world, Terry Comito mentions that "...Socrates had supposed that 'trees and countryside have no desire to teach me anything.' Confronted with the unsuspected realities of the place, however, his language becomes uncharacteristically 'dithyrambic', and gradually a sense awakens in him that his ideas have come to him from 'some other source, flowing in through my ears, filling me like a pitcher.'"[6] When considering that thoughts are directly influenced by one's surroundings, it is no coincidence that the gardens of Ficino's Academy at Careggi "...exist precisely in order to make room for the divine playfulness ('in the mode of Apollo and as it were poetical') to which the true philosopher aspires, the play of the imagination in creation's various light. ...Ficino has discovered that it is the beauty of the garden itself that 'summons' man to the secrets of the inmost sanctuary."[7] In his writings, Ficino is adamant about the relation of philosophy with the soul's experience. For the men of letters, in his *Book of Life*, he recommends, "the frequent sight of shining water, the sight of green or red colors, the use of gardens or woods, walks and rivers."[8] The second Book, "On How to Prolong Your Life," suggests that "old people in winter should be like sheep seeking open sky. In summer they should be like

birds seeking pleasant places, visiting streams, and dwelling among green and fragrant plants. For these living and breathing things work to increase the spirit of man." He also wants to get older people "back to Venus through gardens and meadows....While we are strolling through all this greenery, we might ask the reason why the color green is a sight that helps us more than any other..."[9] It is appropriate that upon entering *Il Sacro Bosco* we should be greeted with an inscription reminding us of this connection between contemplation and experience. The inscription implies that it is through the experience we are about to have that we will gain knowledge of the Divine, an understanding of the One. Ficino relates wisdom to love by saying that, "...with regard to wisdom, love is placed half way between wisdom and ignorance, because it partly lacks wisdom and is partly wise."[10]

A more direct connection to love would be the leaning house's connection to *Il Sacro Bosco* as a memorial garden to Giulia Farnese. "...in 'Bomarzo, the extravagant garden' (Italian Quarterly, 11, No. 42 (1967)), Josephine von Henneberg demonstrated the relationship of the Leaning House to Achille Bocchi's emblem for Carlo, son of Antonio Ruino, and Carlo's mother (Antonio's wife) Isabella Filicina..."[11] The Leaning House was a symbol of the woman's constancy while her husband was away at war.

Margaretta J. Darnall and Mark S. Weil's interpretation of the leaning house is in part what led me to my thesis of the garden as a path through lessons on love that one must experience before reaching the Divine. Darnall and Weil put a moral spin on the garden, claiming that the garden is structured on Dante's *Divine Comedy* where the lower terraces are a false paradise that one must leave behind, turn one's back on in order to reach Divine Love. "The Leaning House is a visual reaffirmation of the purpose of contemplation. It is a simple structure amidst worldly luxury, and from within it allows insight into the corrupt nature of such luxury. From the Leaning House towards the southeast the Exedra, the Grotto of Venus, and all other objects appear to be askew; the Love Theatre looks irrational and grotesque. Looking out to the northeast only the sky is visible. The House offers a clear choice and suggests the proper alternative."[12] In order to explain the absurdity of this reading we will continue with the statue of Venus (fig. 6).

Venus is a symbol for Earthly Love; however, she is also a symbol of Heavenly Love. In Chapter VII of the Second Speech entitled "On the Two Kinds of Love and the Double Nature of Venus," Ficino says that there are,

"...two Venuses which are accompanied by two loves. One Venus he calls the Heavenly, the other Earthly....The first Venus, which is in the Angelic Mind, is said to have been born of Uranus 'of no mother', because for the natural philosophers, mother means matter and the Angelic Mind is completely foreign to a relationship with corporeal matter." This Venus "rose out of the foam of the sea where the seminal fluid fell from the castration of Uranus." "...The second Venus, which is located in the World-Soul, was born of Jupiter and Dione: 'Born of Jupiter'– that is, of that faculty of the World Soul which moves the heavens. She it was who created the power which generates these lower forms....To sum it all up, Venus is two-fold: one is clearly that intelligence which we said was in the Angelic Mind; the other is the power of generation with which the World-Soul is endowed. Each has as consort a similar Love. The first, by innate love is stimulated to know the beauty of God; the second, by its love, to procreate the same beauty in bodies....Therefore, there is a Love in each case: in the former, it is the desire of contemplating Beauty; and in the latter, the desire of propagating it; both loves are honorable and praiseworthy, for each is concerned with the divine image."[13]



Figure 6. Grotto of Venus. Photo by author.

The Venus at *Il Sacro Bosco* clearly represents both Earthly and Heavenly Love. The statue is placed on a shell, as in Botticelli's *The Birth of Venus*, which depicts the new-born Venus, Heavenly Love, rising from the sea. The Venus in *Il Sacro Bosco* is also partially clothed. "...The Venus who appears clothed in an earthly garment is an 'image' of the celestial."[14] Yet, the upper portion of the statue of Venus is bare, representing Earthly Love.

Ficino goes on to explain that it is possible to abuse love if a man is too eager for procreation and gives up contemplation. So, once again, earthly love is not bad in and of itself, it

is only bad if it is abused. Ficino also warns in the *Book of Life* that careful contemplation and Venereal activity are two extremes and it is best to reside somewhere in between. "The astrologers say that Venus and Saturn are enemies of each other. Nonetheless, in heaven, where all things are moved by love, where there is no fault, there can be no hatred. When they say enemies, therefore, we must interpret this as meaning that they differ in their effect....Imagine Saturn now as in the center, giving pleasure, and Venus at the circumference, giving pleasue. Pleasure is really a kind of food for the spirits. So, from opposite sides, Venus and Saturn chase after the flight of our spirit. She lures us to external things through her pleasure, while he, meanwhile, through his pleasures, calls us back to the innermost things. So they distract and dissipate the spirit if they both move at the same time. This is why there is nothing more harmful to the business of being contemplative or curious than Venereal activity, and nothing more contrary to Venereal activity than careful contemplation."[15] One is not privileged over the other. Ficino is not asking readers to turn their backs on Venus. In fact, he is advising readers to reside somewhere in between the two.

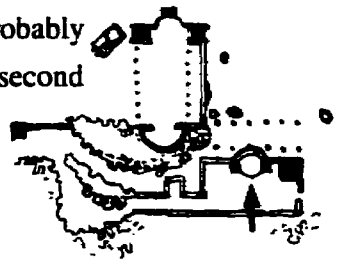


Figure 7. Mask near the Grotto of Venus. Photo by author.

Before moving over to the Love Theatre, we notice two small masks with open mouths and rams horns (fig. 7). They are located at the top of the wall on either side of the Grotto of Venus. Behind us, the Love Theatre (fig. 8) resides between the Leaning House and Venus. As Darnall and Weil point out, the Love Theatre has been called a Belvedere because its focal point is an exedra. In the center was a fountain, of which a pipe hole and a drain remain. The niches in the curving wall probably contained statues and the exedra was flanked by staircases leading to the second terrace.[16] The Theatre contains three inscriptions. The one on the back



Figure 8. Love Theatre. Photo by author.



wall is intranslatable:

PER IMIL VNITA MI SON AG...
PARMI CORTO...

The other two inscriptions are on the bases at the outer edge of the steps. The inscription on the right dates the Theatre,

VICINO
ORSINI
NEL
MDLII

and the inscription on the left reads,

SOL PER
SFOGAR
IL
CORE
"Only to give vent to my heart."(Darnall and Weil, 31.)

Darnall and Weil relate this to "Petrarch's 293rd lyric poem in which the poet contrasts the pleasing quality of his poetry with the loss of his beloved." It reads, "And certainly all my effort at that time was to give vent to my sorrowing heart in some fashion, not to gain fame." So Darnall and Weil translate the Love Theatre as "a place where one awakens from the vanities of earthly love and the apparent beauty of the Love Garden in the Sacro Bosco and becomes aware of the serious nature of the garden. The message of both Petrarch's poem and the Love Theatre is that one must look beyond the pains and pleasures of earthly love and earthly art to a higher good."[17] This moral reading is again problematic. The Renaissance knew well that we must experience the pains and pleasures of earthly love in order to understand the Divine.[18]

Around the corner from the Grotto of Venus is the Barcaccia, a tub-like boat into which water shoots from the dolphin heads at either end (fig. 9). In Ariosto's *Orlando Furioso* there are two knights, Ruggiero and Astolfo, who are searching for a cure for Orlando's madness. In their search, they get trapped on Alcina's magical island. "In *Orlando Furioso*, Ruggiero escapes from

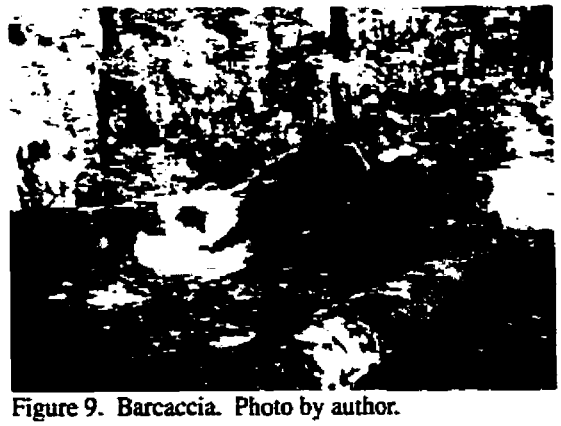


Figure 9. Barcaccia. Photo by author.

the kingdom of Alcina to that of Logistilla in a small bark piloted by an old boatman, who instructs Ruggiero to thank god for his salvation. Ariosto's use of the barca and the wise boatman is reminiscent of Petrarch who also uses the familiar topos of the small boat at sea for the condition of the soul as it moves through life, and in his 366th lyric poem he prays to the Virgin as, 'the star of his tempestuous sea, guide on whom every faithful helmsman relics: see in what a terrible storm I am, alone, without a tiller...'"[19] We could also relate the Barcaccia to Dante's crossing of the river Acheron into Hell ferried by Charon, or his crossing of the River Tiber on The Ship of Souls ferried by an Angelic Pilot to the world of Purgatory. But all of the interpretations seem to be ignoring the only clues given to the purpose of the boat – its placement between the Nymphaeum and the Grotto of Venus, and the dolphin heads on either end of the boat. "The realm of Venus was identified not only by the goddess herself and the plants and animals, such as *dolphins* and swans, sacred to her, but also by her prankster son Cupid , the god of love."[20] In *Hypnerotomachia Poliphili*, Polia and Poliphilo are taken to Venus' home, the Island of Cytherea, by Cupid in a golden bark. Nymphs row them out to sea, then Cupid sails the bark by spreading his wings and calling on Zephyr to blow. As they are sailing, the sea-gods rise to pay homage to the god of love. They include Neptune, the Tritons and the Nereids riding dolphins. Poliphilo contemplates the miraculous Cupid. "Oh lovely bird," he says to himself, "even so hast thou built thy nest in my heart," and, looking into Polia's eyes, he goes on: "Oh, sweetest of mirrors, how has thou changed my heart into a quiver for Cupid's arrows. Oh, lovely twain, I am your prey. Share it between you. No greater happiness could befall me."[21]

Before we arrive at the nymphaeum around the corner, this is a perfect place to elaborate on the Renaissance relationship between the body and the soul. The body and the soul speak two separate languages. The inner sense alone understands and can translate both languages. "...the body opens up to the soul a window to the world through the five sensory organs whose messages go to the same cardiac apparatus which now is engaged in codifying them so that they may become comprehensible. Called *phantasia* or inner sense, the sidereal spirit transforms messages from the five senses in phantasms perceptible to the soul. For the soul cannot grasp anything that is not converted into a sequence of phantasms: in short, it can understand nothing without phantasms..."[22] This intermediary between the body and soul is made of the same substance as the stars, the spirit or pneuma.[23] Couliano explains that we do not love one whom we do not know, a stranger to ourselves, we love the model of the beloved that has been carved into our soul.[24] Ficino explains, "there is also the

fact that the lover engraves the figure of the beloved on his own soul. And so the soul of the love becomes a mirror in which the image of the beloved is reflected. For that reason, when the beloved recognizes himself in the lover, he is forced to love him."[25] Is this the mirror Poliphilo refers to while gazing into Polia's eyes in Cupid's bark? In the *Book of Life*, Ficino explains that if your mirror is not dirty, it is possible to draw the spirit of the world into yourself.[26] "...the world both lives and breathes, and it is possible for us to draw its spirit, conforming to it in its own nature, especially if it proceeds in a related way, that is, especially if it goes forth in a heavenly way. It goes forth in a heavenly way if it is purged of all filth, and of all the stuff that sticks to it that is unheavenly. I do not mean just the kind of filth in your soul, on your skin, on your clothes, in your house, or in the air."[27]

Now, back to the Nymphaeum (fig. 10) which is around the corner, on the right. Darnall and Weil report that "originally it was an enclosed space covered by a barrel vault with rosettes in the coffers. It contained a fountain, statuettes of nymphs, several of which are still in place, and a long inscription..."[28]

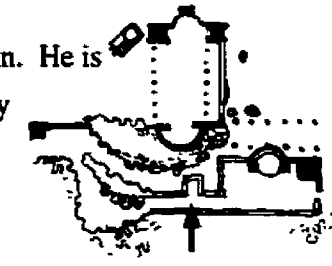


Figure 10. Nymphaeum. Photo by author.

L'ANTRO LA FONTE IL LI
D'OGNI OSCURO PENSIER GL
"The cave and the fountain free one
from all serious thoughts."(Darnall and Weil, 27)

After relating the Nymphaeum to a threshold (it is not a threshold) in *Orlando Furioso*, Darnall and Weil interpret it as a place where, "Vicino offered his guests superficially beautiful architecture filled with alluring damsels. In Renaissance terms this is a false paradise, a place where insidious luxury and sensual love overcome duty and devotion. The garden offers a life of love and ease; it may be evil, but it is profoundly appealing."[29] Once again Darnall and Weil have an overmoralistic view of the Nymphaeum relating it merely to lust. But, we must not forget that the garden was dedicated to Vicino's wife, Giulia Farnese, for whom he had the highest love and respect, much like the love Poliphilo has for Polia.

In *Hypnerotomachia Poliphili*, Poliphilo finds himself in a fertile plain. He is once again getting ready to quench his thirst when he is approached by



five lovely maidens. Their names translate to Touch, Smell, Sight, Hearing and Taste. They ask who he is and he answers that he is the most disgraced and unhappiest lover in the world. The nymphs answer that few can escape the route he has taken and now he must be quiet, comfortable and settle his heart to rest, for he has come into a place of pleasure and delight. They tell him to abandon strife and discontent.[30] (Could this be the "serious thought" Vicino Orsini's inscription refers to?) The nymphs take him to a bath house, disrobe and enter the water. Poliphilo joins them and forever faithful, talks of his love for Polia. The nymphs play tricks on him, including anointing him with a balm that fills him with lasciviousness, then they "relieve" him with an herb before taking him to Queen Eleuterilda's. The fact that the Nymphaeum in *Il Sacro Bosco* includes a shallow fountain in front of the nymph's statues fits in perfectly with *Hypnerotomachia Poliphili*. In this story, Poliphilo must experience bathing with the nymphs before they will take him to see Queen Eleuterilda who will eventually allow him to proceed to the three doors and to an encounter with Polia.

Elisabeth Macdougal explains that the nymphaeum in the Renaissance was created from literary sources in antiquity. "The nymphaeum was more than an evocation of the simple pleasures of rural life. It was intended to remind the viewer of the more perfect world of the Golden Age..."[31] She goes on to say that "ultimately the spectator was carried beyond the initial sensual pleasure to an edifying and uplifting contemplation of philosophy and life."[32] It is through the stimulation of the senses that knowledge is eventually formed. In the *Book of Life*, under the heading, "On Caring for the Health of the Men of Letters," Ficino explains that the spirit must not be neglected. "From the warmth of the heart, where it is produced from a thinner blood, it flows to the brain, and there the spirit works hard for the functioning of the interior, rather than exterior, senses. That is why the blood serves the spirit, the spirit serves the senses, and the senses, finally, serve reason."[33] In Ficino's *Commentary on Plato's Symposium on Love*, he explains that "since the cognition of our intellect takes its origin from the senses, we would never be aware of and never desire the goodness itself hidden in the heart of things if we were not attracted to it by the visible signs of exterior beauty."[34] This is not to say that Ficino does not create a hierarchy within the senses, but they all remain important. "...Six powers of the soul are counted as pertaining to cognition: reason, sight, hearing, smell, taste, and touch. Reason is assigned to supreme divinity, sight to fire, to air hearing, to the odor of vapors smell, to water taste, touch to earth."[35] Touch, taste and smell pertain to the body, which is earthly. Reason, sight, and hearing pertain to the soul because these are the powers that can sense things further away

and reason can also perceive the heavens and the past and future. The soul strives after what pertains to reason, sight and hearing. The other three senses, touch, taste, and smell are necessary to the body for nutrition, comfort or generation, so the soul desires these not for itself but for its body.

In front of the nymphaeum are the curving lover's benches with a fallen volute at one end, used as an armrest (fig. 11). Although it is carved of the same stone as the bench, it implies that it is an ancient remnant found and placed in the garden. Behind the benches on the wall beside the Nymphaeum is a relief of the Three Graces (fig. 12), traditionally seen as the attendants of Venus. They are also an illustration of the trinity of which Venus is the unity. In ancient times the Three Graces were a symbol for the giving, receiving, and returning of benefits. But, as Edgar Wind points out, much of the ancients' imagery was designed to distract the attention of the multitude in order to protect divine secrets from profanation.[36] In studying different images of Three Graces, Wind puts a lot of emphasis on the details of whether or not they are clothed, the placement of their hands, which way their body is facing, and which way their head is turned. The Three Graces in *Il Sacro Bosco* are almost identical to the Three Graces on Pico della Mirandola's Medal (fig. 13), which Wind dates as early 1483. The Three Graces on the medal are labelled Pulchritudo, Amor, and Voluptas (Beauty, Love and Pleasure), titles obviously influenced by Pico's teacher, Marsilio Ficino. Ficino believes that God governs by Threes. "This Divine Beauty creates in everything love, that is, desire for itself, because if God draws the world to Himself, and the world is drawn from Him there is one continuous attraction, beginning with God, going to the world and ending last in God, an attraction which returns to the same place whence it



Figure 11. Detail of Fallen Volute on Lover's Bench. Photo by author.

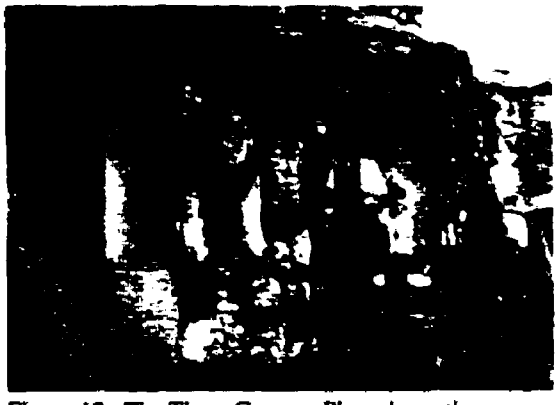


Figure 12. The Three Graces. Photo by author.

began as though in a kind of circle. This single circle, from God to the world and from the world to God, is identified by three names. Inasmuch as it begins in God and attracts to Him, it is Beauty; inasmuch as, going across into the world, it captivated the world, we call it Love; and inasmuch as it returns to its source and with Him joins its labors, then we call it Pleasure. In this way Love begins in Beauty and ends in Pleasure."[37] Love is Passion aroused by Beauty. In this Platonic definition of Love as illustrated in Pico's medal, Love is the mediator between Beauty and Passion. "Only by the vivifying rapture of Amor do the contraries of Pulchritudo and Voluptas become united. But to achieve the perfect union of contraries, Love must face the Beyond; for as long as Love remains attached to the finite world, Passion and Beauty will continue to clash."[38] The middle Grace, Amor, has her back turned from us, facing the Beyond, while the other two, Beauty and Passion, are coming from the Beyond. Now, Wind has dated Pico's medal by researching the split between the student and his teacher, the first signs of which appear in the *Commento*, 1486. In the *Commento*, the Graces represent Pulchritudo-Intellectus-Voluntas. Pico has changed Amor to Intellectus (Love to Love of understanding), and, as Wind puts it, "deprived the third Grace (Voluntas) of the fulfilment of joy (Voluptas)."[39] The brunt of the disagreement, in regards to the Three Graces, seems to revolve around whether or not Passion can be noble. "The Stoic assumption that pleasure must be deficient in virtue, and virtue deficient in pleasure, never gained much credence among Renaissance Neoplatonists....Ficino argued that only a limited virtue and a limited pleasure would lead to vice...The more comprehensive the virtues and the pleasures become, the more largely they are bound to overlap; and when a pleasure or virtue become all-embracing–that is, when they reach a perfection achieved only in states of ecstasy – then goodness becomes indistinguishable from bliss."[40] Ficino believed that Voluptas should be reclassified as a noble passion. In Ficino's fifth speech of his *Commentary*, he says that because Beauty greatly arouses the soul, it is called Pulchritudo. Pleasure comes from the noble disposition of the soul.[41]

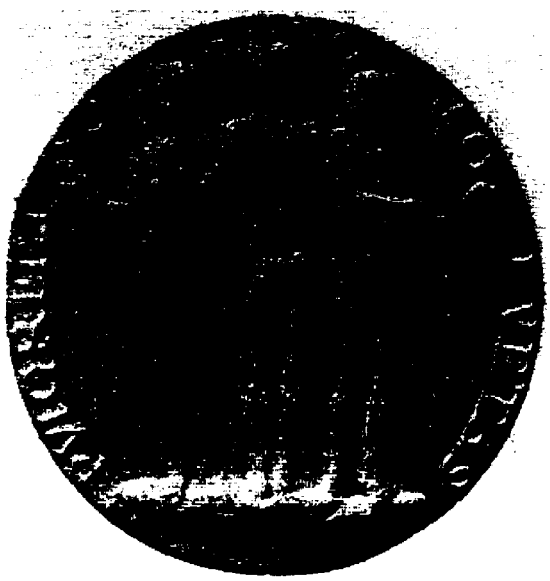


Figure 13. Pico Della Mirandola's Medal of The Three Graces. Printed from Edgar Wind's *Pagan Mysteries in the Renaissance.*

When comparing the Three Graces on Pico's medal and the Three Graces at *Il Sacro Bosco*, we realize that none of them are clothed and, although the relief in the garden is quite weathered, none of the Graces appear to have any jewelry or flowing hair. Like Amor in Pico's medal, the middle Grace also has her back turned away from us. But, unlike Pico's medal, she is facing Pulchritudo (Beauty) and Pulchritudo is looking back at Amor. Despite the weathering it seems that the third Grace's face is turned away from the group. Voluptas is facing the Nymphaeum. The placement of Amor's hands is also important. In direct contrast to Pico's medal, Amor's left arm is reaching for Pulchritudo while her right hand is resting on Voluptas' shoulder. Love is the desire for Beauty. In the grouping, Love is reaching for Beauty. If Love begins in Beauty and ends in Pleasure, this version of the Three Graces is at the beginning of Love. The relief is telling us that as an observer, or a character in the garden, we will not understand Love until we reach the temple at the top.

Now we must move on down a small path to a grouping of statues which includes the Pegasus fountain, directly in front of us, with a huge Turtle with winged Fame on its back behind Pegasus. The turtle is facing the edge of the space which we can hear is defined by a stream. The Orc's mouth is in front of the turtle and a relief of a tree carved in stone is directly to our right. Darnall and Weil also relate this grouping to *Orlando Furioso*. The two knights who are searching for a cure for Orlando are "magically transported to the realm of Alcina, a lustful, Circe-like witch who entices knights into her garden of earthly delights and transforms them into animals and trees after her appetite for them has been sated."[42] Astolfo is carried to the island by a sea-monster, thus the orc. The turtle represents the mount of the captain of Alcina's guard, who keeps the knights imprisoned on the island. The other knight, Ruggiero, is carried to the island by a hippogriff, a Pegasus-like creature. Once there he ties it to a myrtle tree, which cries out in pain. Ruggiero discovers the tree to be Astolfo who warns him to escape the island.

The Pegasus statue in *Il Sacro Bosco* is near the relief of a tree carved in stone (fig. 14). Much could be made of this imitation in nature of art imitating nature – a natural stone carved to look like a tree. In *Hypnerotomachia Poliphili* after a banquet at Queen Eleuterilida's Palace, two maidens, Logistica and Thelemia, take Polyphilo to see the Queen's gardens. The first one contains pots of plants, "every one of pure glass, exceeding a man's imagination or belief. The roots and stalks of the plants are made of gold."[43] The maidens take him to another garden

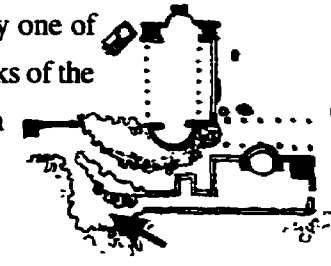




Figure 14. Myrtle Tree Relief. Photo from promotional material- *Guide to The Monster Park* by Giovanni Bettini, 1993.

which is made of pure silk and pearls, "where he sees many common plants of all species, so vividly expressed, that nature would have taken them for her own."[44] If the real world is a metaphor for the wisdom of God, the built work is an embodiment of the knowledge of this world. An imitation in nature of art imitating nature allows man to ascend one step closer to an understanding of the Divine. "Mimesis was not mockery or trickery, but an assimilation of the self to the otherness of Being in order to undergo a change in the self...In nature itself, things simulate other things and dissimulate their own natures. Renaissance mimesis was not just an imitation of nature, but an imitation of the techniques of natural imitation."[45]

While the connection to *Orlando Furioso* is an interesting interpretation, Darnall and Weil also acknowledge the more popular representations of Pegasus as a symbol for the love of literature and poetry, and the Turtle with Fame as 'festina lente.' Pegasus strikes his foot on Mount Helicon causing a spring of muses to flow. In Giovanni Guerra's drawings, the original Pegasus fountain was surrounded by nine muses and statues of Jupiter, Apollo, Bacchus, and Mercury (fig. 15 and 16).[46] Pegasus was a common feature of most gardens of the time. It can be found as the source of the waters at Villa D'Este and up the street from Bomarzo at Villa Lante. A woodcut of Pegasus can also be found in *Hypnerotomachia Poliphili*. After Poliphilo emerges from the splendid pyramid with the obelisk, he sees the copper winged horse on which children are attempting to ride. On the horse's pedestal are two reliefs inscribed with the words "Time" and "Loss," and on the horse's forehead is the word "Generations." The relief entitled "Time" shows men and women with double faces looking forward and backward, and the other relief shows maidens and children picking flowers. I think it is best here to postpone the discussion of Time to other statues we will encounter later in the garden.

The other major statue of this grouping is the Turtle with Fame on its back (fig. 17). Fame is a winged figure blowing a trumpet. The statue of Fame in *Il Sacro Bosco* is reminiscent of Fortune and can be related to a number of 16th-century figures.[47] Edgar Wind points out many times that the paradox of opposites in the Supreme One has a broad appeal without losing its depth. But for this to occur, the obscure must be combined with the familiar in the form of a magic word: a phrase that can be "quickly grasped and easily repeated, and at the same time sufficiently wide and mysterious to suggest a comprehensive philosophy of life."[48] The Renaissance found this combination in 'festina lente' and expressed it in an unlimited variety of images. In *Hypnerotomachia Poliphili* alone, 'festina lente' is illustrated in more than eighty variations: An image of elephants turning into ants, and vice versa, the image of the girl half-seated, half-rising, with wings on the side of the seated foot and a tortoise in the hand on the side of the lifted foot, also in hieroglyphs, the image of a dolphin around an anchor (fig. 18).[49] All advising to 'make haste slowly' and illustrated, as in *Il Sacro Bosco*, with the paradox of a figure symbolising speed, the figure of Fame with her clothes blowing from fast motion, entangled with a figure,weighted down with slowness, the turtle in the garden. Discordia concors, the final union from a variety of discord, a symbol for all of *Il Sacro Bosco*, the Harmony born from opposites, born from Venus the Goddess of Love and Mars, the God of War. But this harmony is not fully realized; we must continue up the path to the second terrace.

Human beings once had three sexes, the male, female and bi-sexual born from the Sun, the Earth, and the Moon. Each person was whole and round. They had four hands, four legs and two faces. But they were proud and overambitious. Before they could roll up to the gods, Jupiter cut each one lengthwise, threatening to do it again if they revolted in pride against the gods once more. "Hence certainly a reciprocal love is innate in men, the conciliator of their original nature, striving to make one out of two and to heal the nature of men. For each of us is half of a man, just as the little fish which are called psettae, or goldfish, being sliced, from one become two. But each human seeks its own half... And so the desire and longing for the whole to be restored receives the name of love. This, for the present time, helps us greatly while it leads each of us to his own formerly lost half, and for the future, inspires the highest hope in us who worship God piously, that by restoring us to our former condition and healing us He will make us most blessed."[1] In Ficino's Christian interpretation of this, he explains how our souls became imprisoned by our bodies. Man's souls were originally whole, equipped with a natural and a supernatural light. But once again they were overambitious and aspired to equal God. They were divided, lost their supernatural light and fell immediately into bodies.[2] So we seek Love to restore the wholeness we lost when we were divided.

You may remember the symbol for Heavenly Venus on the First Terrace as the sea shell – a Venus newly born from the castration of Uranus. But why must Love be born from such a violent dismemberment? "...for whenever the supreme One descends to the Many, this act of creation is imagined as a sacrificial agony, as if the One were cut to pieces and scattered. Creation is conceived in this way as a cosmogonic death, by which the concentrated power of one deity is offered up and dispersed: but the descent and diffusion of the divine power are followed by its resurrection, when the Many are 'recollected' into the One."[3] We must feel the pain at separation. A loss of vital self signifies the birth of love. Love is called "'bitter-sweet,' because love is voluntary death. Insofar as it is death, it is bitter, and insofar as it is voluntary, it is sweet. He who loves, dies; for his consciousness, oblivious of himself, is devoted exclusively to the loved one.... Therefore, everyone who loves is dead in himself."[4] But, through mutual love the loved one lives in the lover. "A has himself, but in B; and B also has himself, but in A. When you love me, you contemplate me, and as I love you, I find myself in your contemplation of me; I recover myself, lost in the first place by own neglect of myself, in you, who preserve me. You do exactly the same in me." Both lovers die only to be resurrected in each other. But what if the love is not returned – I give

my heart to you but nothing is given back? "...he who does not love his lover must bear the charge of homicide, nay rather the triple charge of thief, homicide, and desecrator."[5] "As soon as Eros enters his life, the lover is lost, for he goes mad."[6] This madness from from unreturned love helps to explain the next statue we encounter.

We have climbed up the small sloping path and have reached the statue of the Fighting Giants (fig. 19) on the second terrace. It is a huge statue with one giant ripping the other apart by his legs. An inscription on the wall reads,

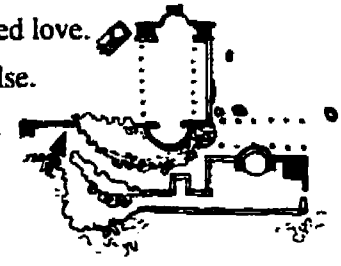
SE RODI ALTIER GIA FV DEI SVO COLOSSO
PVR DI QVEST IL MIO BOSCO ANCHO SI GLORIA
E PER PIV NON POTTER FO WVANT IO POSSO
"If Rhodes previously took pride from its Colossus
so by this one my wood is glorified
and further I can do no more than I have done."(Darnall and Weil, 14)

The fragment of the inscription on the wall closest to the giants reads,

....PIER GIGANTE
....O SCEMPIO
....ANGLANTE


Figure 19. Fighting Giants. Photo by author.

This statue grouping is often referred to as Hercules and Cacus, but as S. Lang points out, the details of the statue do not conform to any known Hercules, Cacus groups. She says that the closest parallel can be found in Ovid's *Metamorphoses* of Polyphemus killing and tearing apart Odyseus, but even that is not satisfactory because the giant in *Il Sacro Bosco* is not a Cyclops.[7] Darnall and Weil convincingly relate the statue to the scene in *Orlando Furioso* where Orlando has recently gone mad after seeing the inscriptions his beloved carved into a cave with her new love. Here he is tearing apart a man by his legs; he has gone mad because of unreturned love. He has lost himself and is expressing it by dismembering someone else. This statue is showing the paradox of Love. Love is born of castration,



and begins with loss of vital self. Then, if not returned, it could, as in this case, result in the dismemberment of someone else. Love has come full circle; it is at once pleasure and pain.

Before we leave the Fighting Giants, we notice the sound of rushing water. We peer behind us, through the bushes and see the water dropping through a stone dam into the small stream. From here we can turn left and continue up rather steep stairs to the third terrace, or we can continue on along the path to the right. As we walk along the path to the rest of the second terrace, we look down over the lover's benches on the right (fig. 20). On the left we approach a mask fountain (fig. 21) similar to the faces in the wall near the Grotto of Venus. Although signs of weathering have considerably disguised the details, this mask, as well as the masks on the first terrace, appear to have curved ram's horns with bunches of fruit hanging from them. The heads have been identified as Jupiter Ammon, worshipped by the Egyptians, the Arcadians, and also in Greece.[8]

Before seeing the next statue, we have a nice view of the theatre and the leaning house (fig. 22). On our left is the statue of the Leaning Nymph (fig. 23). *In Hypnerotomachia Poliphili*, after Poliphilo has been chased by a dragon with wings, he



Figure 20. View of Lover's Benches from the Second Terrace. Photo by author.



Figure 21. Jupiter Ammon Fountain. Photo by author.



Figure 22. View of the First Terrace Theatre and Leaning House. Photo by author.

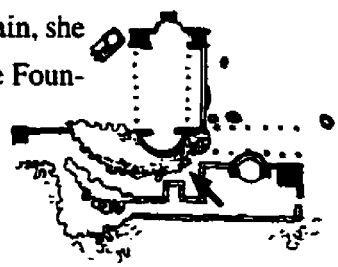
finds himself wandering in a fertile plain. He comes upon an octagonal building and in it finds a nymph sleeping upon a folded cloth (fig. 24), which hides her "woman, meant to be kept secret."[9] Out of her breasts flow small streams of pure clear and fresh water. Cold water flows out of the right breast and warm water out of the left breast. Both land in separate vessels which eventually run together, channeled on the ground to the rest of the plain, keeping the entire region fertile. On the frieze on the building, Poliphilo reads, "To her who brings forth all things." The Leaning Nymph is the mother of all things, the *prima materia*. Poliphilo compares her beauty to Venus saying that it looked as if a most beautiful lady had been changed to stone in her sleep, her heart still panting and her sweet lips ready to open. From her head her loose hair waving, her thighs of a convenient size and her fleshy knees bending up and retracting toward her. The comparison in Poliphilo's description with the statue in *Il Sacro Bosco* is uncanny. The statue in the garden has unusually large hands and thighs. The knees are bent backward and her head is tossed back in quite an erotic pose. Although the Leaning Nymph is not part of a fountain in *Il Sacro Bosco*, she can be related to the Sleeping Venus at Villa D'Este or the Sleeping Nymph in the Grotto of Venus at Villa Lante. Both of these are directly connected to water as part of a fountain. Like Venus, she is not only a symbol of voluptuous pleasure but also sensuous abundance. Again, she is the mother of all things; she is fertility. It is interesting to note that the Fountain of the Giant around the corner is often referred to as Neptune



Figure 23. Sleeping Nymph. Photo by author.



Figure 24. Woodcut of Sleeping Nymph Fountain in Hypnerotomachia Polifili. Image taken from Linda Fierz-David *The Dream of Poliphilo.*



(fig. 25). The Leaning Nymph as related to Venus is a symbol of heat, as Neptune is to water, both of which are necessary for all things to grow in the garden. Both heat and water also created Heavenly Venus from the castration of Uranus. "She was born through the union of moisture – the sea, and heat – the genitals of Uranus."[10]



Figure 25. Fountain of the Giant with Orc. Photo by author.

Darnall and Weil believe that the Leaning Nymph is a symbol for Angelica in *Orlando Furioso*. Their interpretation includes the statues of the Orc and the Fountain of the Giant around the corner from the Sleeping Nymph. The statue of the Giant is very similar to the Giants at Villa Lante and Caprarola which represent the Tiber and Arno Rivers, yet Darnall and Weil relate it to the god Proteus on Ebuda, in *Orlando Furioso*. Proteus threatens the inhabitants of Ebuda with total destruction unless they sacrifice a maiden to the sea monster, the Orc near the Giant in *Il Sacro Bosco*. Before Orlando loses his wits, he rescues Angelica, one of the maidens chained to a rock near the Giant, whom the statue of the Leaning Nymph could represent.

We have now walked around to the Fountain of the Giant whose terrace is lined with large vases (fig. 26). The vases near the Giant have inscriptions. The one on the right of the fountain reads,

NOTTE ET GIORNO
NOI SIAM VIGILI
ET PRONTE
A GVARDAR QVESTA
FONTE
"Night and Day
we are vigilant
and ready
to guard this fountain."[11]



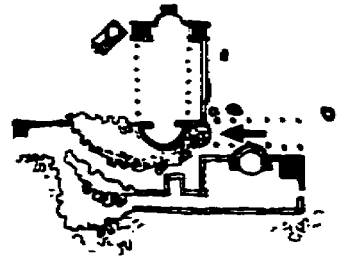
Figure 26. Second Terrace with Vases and the Founatin of the Giant. Photo by author.

The vases on the left of the fountain read,

NOTTE ET GIORNO

And,

FONTE NON FV
TRA
CHIN GV AR DIASIA



DELLE PIV STRANE
BELVE



Figure 27. Dragon. Photo by author.

Darnall and Weil say this inscription refers to a fountain and strange wild beasts. They call this entire terrace of vases the moonscape in *Orlando Furioso* where the knight Astolfo travels to find a cure for Orlando. "The rows of Vases represent the vessels on the moon that contain the lost wits of humans still living on earth. According to Ariosto all men slowly lose their sanity and what is lost is contained in crystal vases on the moon. The largest, fullest vase, the one containing Orlando's wits, is described as being apart from the others, further up the hill."[12] In the distance in the garden is a larger, more ornate vase on the same terrace.

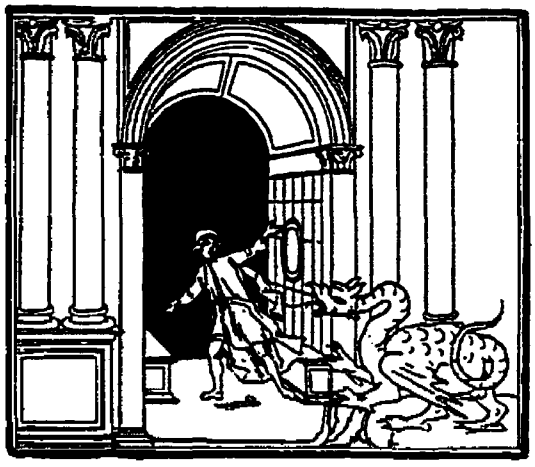


Figure 28. Dragon chasing Poliphilo in *Hypnerotomachia Polifilo*. Image taken from Linda Fierz-David *The Dream of Poliphilo*.

On the other side of the vases near the Fountain of the Giant is the statue of the Dragon (fig. 27) and the statue of the War Elephant. Behind the Dragon we catch a glimpse of the Mouth of Hell and at the other end of the terrace we can see the top of the Leaning House and the statue of Ceres. The proximity of the Dragon with the giant's head, Ceres, the elephant and the nymph around the corner recall Poliphilo's encounter with the triple-tongued winged dragon in *Hypnerotomachia Poliphili* (fig. 28). In the first part of the story, Poliphilo finds a huge, hollow colossus laying on the ground. He can enter into it through its head. Near the colossus is an elephant with an obelisk on its back (fig. 29). After seeing this he goes back to the porch at the base of the pyramid and notices the hieroglyphs of mythological stories and an inscription that mentions Ceres. "To the pious Mother Venus and her son Amor, Bacchus and Ceres have given of their own substance."[13] From here Poliphilo wanders into the vaults and encounters the triple-tongued dragon grating her teeth, making a horrible noise with its scaly tail, and clapping her wings. Poliphilo is horrified, cries out for divine help,

and runs deeper into the dark vaults. It is here that he contemplates his own mortality and, being fearful at the possible loss of Polia, falls into "blobbering tears." After coming close to "drowning in a deep sea of unspeakable sorrows," Poliphilo comes upon an altar, and enters into the fertile plain through an opening.[14] It is here that he finds the fountain of the leaning nymph. Besides the proximity with all of the other statues, the Dragon in *Il Sacro Bosco* also has wings, but unlike the dragon that chases Poliphilo, it is fighting a lion cub and has another cub caught in its tail. Susan Lang relates this grouping to the lost engraving by Leonardo of the fight between the lion and the dragon.[15] Dragons are usually seen as evil, and identified with Satan, but as J.B. Bury points out, another engraving by Leonardo has a dragon *Prudentia*, a lion *Forteza*, holding a palm between them which is *Vitoria*. Prudence will prevail against strength, a quality praised in Giulia Farnese.[16] Also, the dragon was often seen as a protector of a sacred wood, an earthly paradise, as in the Garden of Hesperides where a dragon guarded the golden apples that hung from its trees.[17]

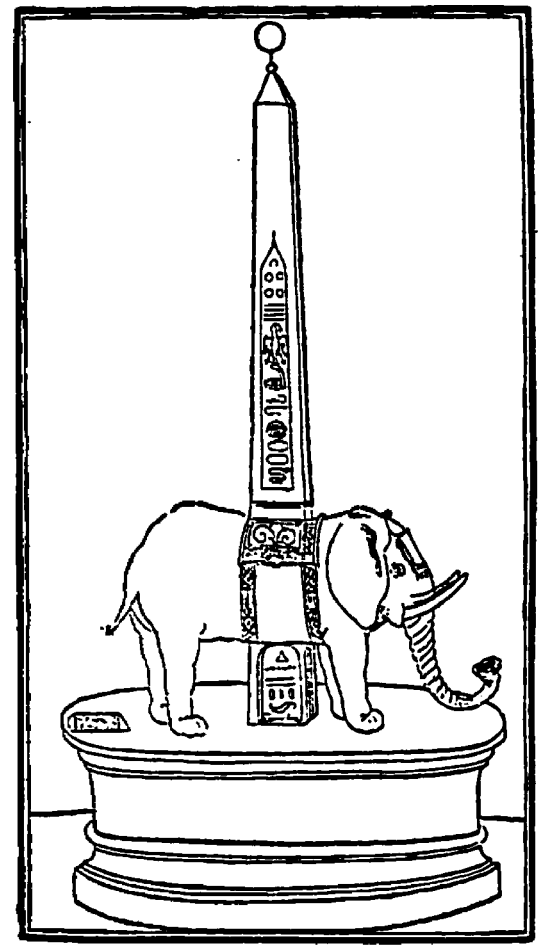


Figure 29. Elephant in *Hypnerotomachia Polifilo*. Image taken from Linda Fierz-David *The Dream of Poliphilo*.

Beside the Dragon is the statue of the War Elephant, carrying a castle-like tower and a very weathered soldier on its back, and a dead Roman soldier in its trunk (fig. 30). Its harness is encrusted with roses, a symbol of Vicino Orsini's family. J. B. Bury has identified the War Elephant as African because of its tusks, now missing, and connects it with Hannibal. Maerbale, Vicino's younger brother, was named after Hannibal's cavalry commander. As a soldier Vicino was captured at the same battle Giulia's cousin Orazio Farnese was killed. J.B. Bury agrees with Lynette Bosch's theory that the lifeless soldier is being supported, not

killed, by the elephant and represents Orazio Farnese.[18]



Figure 30. War Elephant. Photo by author.

The War Elephant in *Il Sacro Bosco* is only similar to the statue of the elephant in *Hypnerotomachia Poliphili* in that they both have tusks and a tower of sorts on their back; however, by looking at the deeper meaning of the elephant in the narrative we can gain a better understanding of an elephant's symbolism in the Renaissance. At the base of the pyramid after Poliphilo flees from the mouth of the hollow colossus, he sees an elephant with tusks and an obelisk on its back. The inscriptions on it read: "The brain is in the head" and "Work and Diligence." Poliphilo enters into the hollow beast and at its back end finds under a light a statue of a black man standing on a sarcophagus with the inscription, "I would have been naked had the beast not covered me. Seek and thou shalt find. Leave me in peace." At the head of the beast is also a light with the statue of a woman pointing toward her head, and standing on a sarcophagus. Her inscription reads, "Whosoever thou mayst be, take of this treasure as much as thou willst. Yet I warn thee, take from the head and touch not the body."[19] Poliphilo does not understand the riddle and decides to leave, "not daring to try the conclusion."[20]

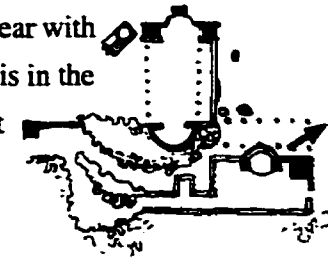
The elephant is wise and strong, but gentle. The elephant is also associated with the moon and with water. Darnall and Weil write that Vicino's friend Ludovico Domenichi said that the elephant is a symbol of the human soul because it practices religion by ritually washing itself and throwing grass to the heavens at every new moon.[21] As a symbol of the moon, light out of darkness, in *Hypnerotomachia Polifili* the elephant also represents Polia, whose name means "white, shining."[22] She is connected with the moon, nighttime, and with water, because when thinking of her, Poliphilo falls asleep. Also throughout his search for her, he is constantly thirsty. In connecting the elephant with Polia, his lost love, the inscriptions are telling the lover to use his head, be persistent, and he shall find his beloved.

The elephant is also connected with alchemy in *Hypnerotomachia Poliphili*.[23] "In alchemy the process is more important than its product, because the world of nature is in perpetual motion and change, never fully objectified and stable. The alchemist/architect must strive to find the primordial unity yet understands that the end is never fully attainable."[24] In this way, alchemy is related to desire, where "fulfillment is never fully present nor fully absent."[25] Alchemy is also related to *Il Sacro Bosco* in that the multiplicity of the statues culminates in the unity of the One, the temple at the top. But it is the experience of the entire garden (the process) that allows us to reach the unity, the temple.



Figure 31. Ceres. Photo by author.

Now we walk to the other end of the terrace, to the statue of Ceres (fig. 31). She is at the opposite end of the terrace, facing the Fountain of the Giant, but tucked away behind the row of vases. I am not convinced of Darnall and Weil's interpretation of this statue as a symbol of lasciviousness and "the lost charms and graces of ladies."[26] They describe the back of the statue as harpies torturing a man, where I see children playing in water with two winged tritons. Both the children and the water are a symbol of fertility, which fits in with the statue as Ceres, the goddess of the crops; however, instead of ears of corn, she has a basket on her head with an aloe planted in it. She symbolizes Nature, Earth and its life-giving generative powers. In Ovid's *Metamorphoses*, a Muse sings the story of Ceres, first singing her praises: "Ceres was the first to break up the sods of earth with the crooked plough, she first planted corn and cultivated crops, she imposed the first laws on the world. All we have, we owe to Ceres. Of her must I sing: I pray that my songs may be worthy of the goddess, for surely the goddess is worthy of my song."[27] She goes on to explain that after Pluto was shot with Cupid's arrow, he was unable to control his desire and takes Ceres' daughter Proserpine. Without rest Ceres vainly sought for her daughter, and in her anger destroyed many crops. Finally she was told that her daughter was in the underworld with Pluto. She went to Jupiter for assistance, begging that her daughter be returned to her. He agreed that Proserpine should spend half of the year with her mother and the other half in the underworld with Pluto. While she is in the underworld, Ceres mourns and nothing grows. The seasons are a direct



result of desire, both Pluto's, and Ceres desire to be with Proserpine.

The fact that the story of Ceres connects her with both desire and fertility relates her to the statue of the Leaning Nymph seen earlier on the same terrace. They are both related to Venus in their desire to procreate the beauty of God in inferior beings. Because they are placed on the same terrace as the elephant, a wise animal proposing the use of the head, it can be read as a reminder to reside somewhere between venereal activity and contemplative activity when it comes to Love. We remember from the first terrace that neither Saturn nor Venus should be privileged over the other. Both are important.


Figure 32. Unknown Animal. Photo by author.

The small animal on the western edge of the terrace is often ignored in writings on *Il Sacro Bosco*. It is couchant with the legs of a horse, extra hair or plumage on its breast plate and a head that is too weathered to identify (fig. 32). J.B. Bury attributes it to the Ethiopian nabum, or camelopard, also called a wild sheep, written about by Elder Pliny.[28] Although Darnall and Weil have chosen to leave it unidentified they do mention that it does not have wings. Wings would identify it as a hippogriff.[29] So, as the animal remains nameless, I will throw into the ring of speculation my own interpretation, partially influenced by Darnall and Weil. The hippogriff that Ariosto created in *Orlando Furioso* had wings, the body of a horse, and the breast plumage and head of a griffin. However, Ariosto's *Furioso* was a continuation, of sorts, of Matteomaria Boiardo's *Orlando Innamorato*. In Peter V. Marinelli's essay "The Flight of Ariosto's Hippogriff", he suggests that Ariosto's hippogriff was influenced in a scene in Boiardo's *Innamorato*. In the pagan Gradasso's lust for a horse, he angrily strikes at a tree root and releases a horse that leaps up from the earth. Boiardo's horse is not winged but moves as swiftly as if it had wings on its feet.[30] Could the unidentified animal in *Il Sacro Bosco* be a conglomeration of Ariosto's hippogriff and Boiardo's wingless horse?

Interestingly enough, Peter V. Marinelli goes on to relate the hippogriff to Ficino's *Commentary on Plato's 'Symposium' on Love*. Atlante's flight of the hippogriff is twice de-

scribed as "...soaring to the stars and descending to graze the earth....Surely it is not unreasonable to hear twice over the voice of Ficino: 'These two eternal loves in us are daemons which Plato predicts will always be present in our souls, one of which raises us to things above; the other presses us down to things below.'"[31] Also early commentators on the *Furioso* related Atlante, the sorcerer who flies and hunts, to Cupid. And, as such, the previously unidentified animal fits in well with the idea that the statues of the garden are a repetition of the theme of love.

The bench at the southern edge of this terrace reads,

> VOI CHE PEL MONDO GITE ERRANDO
> VAGHI DI VEDER MARAVIGLIE ALTE ET
> STUPENDE VENITE QVA DOVE SON
> FACCIE HORRENDE ELEFANTI LEONI
> ORSI ORCHI ET DRAGHI
> "You who have traveled the world wishing to see great and stupendous marvels, come here, where there are horrendous faces, elephants, lions, bears, orcs and dragons." (Darnall and Weil, 53)

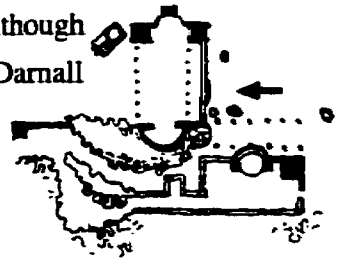


Figure 33. Mouth of Hell. Photo by author.

Now we move back to the other side of the Dragon and the Elephant to the Giant Orc known as the Mouth of Hell (fig. 33). Because of its proximity to the Dragon and the Elephant, I have already related it to the Colossus in *Hypnerotomachia Poliphili*, both of which can be entered through the mouth. But instead of organs with descriptions of cures for ailments, the giant head in *Il Sacro Bosco* contains a pleasant space with a picnic table and benches. The Orc in *Il Sacro Bosco* also contains a distinguishing inscription,

> OGNI PENSIERO VOLA
> "All reason/thought departs." (Darnall and Weil, 47)

Guerra's inscription on his drawing of the Orc reads, 'LASCIATE OGNI PENSIERO VOI CH'ENTRATE' (Leave all reason/thought, you who enter here).[32] Although it is related to the inscription on the Mouth of Hell in Dante's *Inferno*, Darnall and Weil note the difference between the two: Dante uses speranza



(hope), whereas Vicino uses pensiero (thought). Darnall and Weil explain that, "In Dante's poem damnation is loss of hope and his line refers to eternal exile in Hell. At Bomarzo damnation is the loss of reason, a living hell, a disease that can be cured with the help of God."[33] Dante's *Inferno* is the loss of hope, but not for the main character. For Dante it is a path that must be traveled in order to reach Beatrice and the Paradise of the Divine. The same is true in *Il Sacro Bosco*. Many of the statues of the first terrace taught us that our senses serve reason, which serves the Mind, which is our connection with the Divine. By ordering us to leave thought behind, the Mouth of Hell is telling us to return to our senses for a moment to enjoy the "powerfully humorous contrast between the alarming exterior of the Horrendous Face and the tranquil space beyond."[34] Like Dante's experience of Hell, the Mouth of Hell is something we must experience, another rung on the ladder to a better understanding of Divine Love.

But can *Il Sacro Bosco* really be related to Dante's *Divine Comedy*? The inscription on the Orc reads: "All reason/thought departs." It is a statement, not a command to leave thought behind as in the *Inferno*. Also, while Dante descends into Hell, visitors to *Il Sacro Bosco* do not encounter a reference to Dante until they have ascended to the second terrace. Like many Italian Renaissance Gardens, *Il Sacro Bosco* is divided into vertical terraces, which lends itself easily to an analogy with Dante's *Divine Comedy*. In this case however, the analogy to Dante becomes yet another way to falsely place a moral lesson over the garden. Neither can be proved.

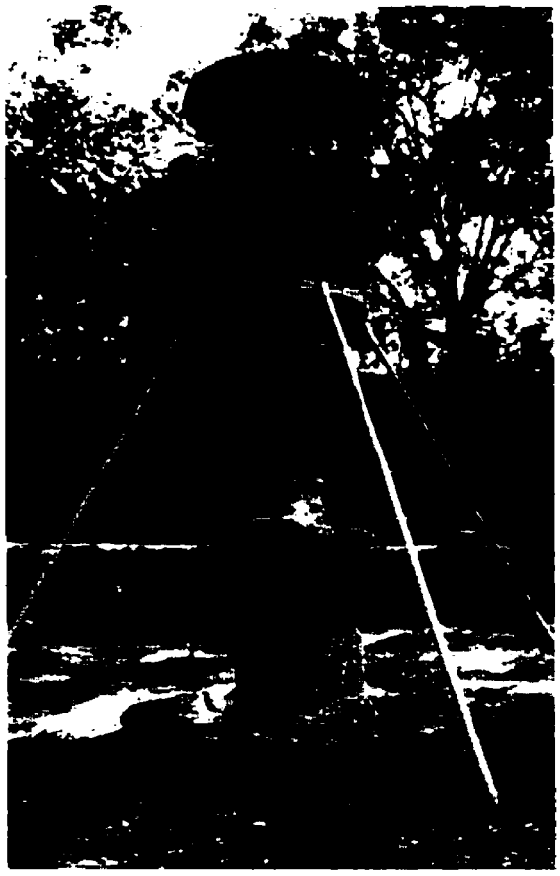


Figure 34. Giant Vase. Photo by author.

Before we arrive at the stairs to the Third Terrace, we pass the large vase (fig. 34) previously mentioned as carrying Orlando's lost wits. It is a reminder of the first statue we encountered on the Second Terrace, the Fighting Giants. We have already talked

about how love results in a loss of vital self, which if not returned causes one to lose their wits. But, Ficino also discusses four kinds of Divine Madness which actually help the soul ascend from its prison in the body back to the One. Although Earthly Lovers are plagued by a certain kind of madness, Divine Madness is different: it "is an illumination of the rational soul through which, after the soul has fallen from higher to lower, God draws it back from lower to higher."[35] In this fall from the One, at the highest, to the body, the lowest, the soul must pass through Intellect, Reason, Opinion and Nature. Because the soul has received a certain unity from the One, the parts of the soul are united even when passing through the multiplicities of the four grades. Of course the soul is also united to the One itself, the cause of all things. "You see therefore that from the One, which is above eternity, it falls into multiplicity, from eternity into time, from time into place and matter. It falls, I say, when it departs from that purity in which it is born, embracing the body too long."[36] The divine madness is what helps the soul to ascend from the body back through the four grades to the One. There are four kinds of divine madness: poetic madness from the Muses, mysterial from Dionysus, prophecy from Apollo, and finally love from Venus. In the descent through the four grades, the soul is filled with discord and disharmony and must become one again in order to return to the One. Poetic madness, "through musical sounds, arouses those parts of the soul which are asleep, through harmonious sweetness calms those which are perturbed, and finally through the consonance of diverse things, drives away dissonant discord and tempers the various parts of the soul." Mysterial madness "makes the tempered things into a single whole from parts". Prophecy "makes it a single whole above parts", and love, the fourth madness, "leads it to the One which is above being and above the whole."[37] Ficino goes on to explain that of all of these madnesses, love is the most excellent.

Now it is time to ascend the stairs to the third terrace.

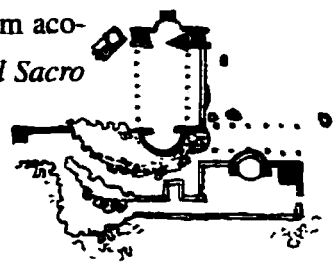
As we ascend the stairs to the third terrace, we notice that the stairs continue directly in front of us and another staircase is on our right, all leading to the Temple on the fourth terrace. The first statue we see is Cerberus (fig. 35).

> "Cerberus, the cruel, misshapen monster, there
> bays in his triple gullet and doglike growls
> Over the wallowing shades; his eyeballs glare
>
> A bloodshot crimson, and his bearded jowls
> Are greasy and black; pot-bellied, talon-heeled,
> He clutches and flays and rips and rends the souls."
>
> "When Cerberus spied us coming, the great Worm,
> He gaped his mouths with all their fangs a-gloat,
> Bristling and quivering till no limb stood firm."[1]



Figure 35. Cerberus. Photo from promotional material- *Guide to The Monster Park* by Giovanni Bettini, 1993.

Cerberus, the triple-headed dog, is the trinity in the underworld, proof that the whole universe is permeated with a triadic rythm. In Dante's *Inferno*, Cerberus is the guardian of Hell. Here in *Il Sacro Bosco*, Cerberus is positioned directly at the base of the Temple. In Ovid's *Metamorphoses*, he is the guardian of the underworld, and is only brought to the surface once. Hercules bound him with chains and brought him up through a cave in Sythia. Cerberus "struggled, twisting its head away from the daylight and the shining sun. Mad with rage, it filled the air with its triple barking, and sprinkled the green fields with flecks of white foam. These flecks are thought to have taken root and, finding nourishment in the rich and fertile soil, acquired harmful properties. Since they flourish on hard rock, the country folk call them aconites, rock-flowers."[2] Cerberus could have been placed anywhere in *Il Sacro Bosco*, but Vicino Orsini placed him here on the third terrace, the sight



of the garden of simples, the curative herbs and flowers used for Vicino's ailments. (One has to wonder if he had any poisonous rock-flowers in his garden?) Cerberus is placed on the terrace that, as will become clear later, has many statues referring to Time. Edgar Wind explains that Cerberus is similar to the three headed beast which accompanied the Egypto-Hellenic god Serapis at Alexandria. However, Serapis' beast had the head of a wolf, a lion, and a dog, signifying the three parts of Time. The wolf, facing left, is the vanished past, the dog looks to the right anticipating the future and the present is the lion in the middle facing the front.[3] Cerberus is protecting the base of the temple dedicated to Giulia Farnese, and across from him is the statue of Proserpine, his companion in the underworld.



Figure 36. Proserpine. Photo from promotional material- *Guide to The Monster Park* by Giovanni Bettini, 1993.

Proserpine (fig. 36) is facing the hippodrome (refer to Guerra's drawing, Fig. 37) which is lined with giant acorns and pine cones. The acorns are symbols of the Golden Age, "a distant time when nature gave freely without the need for plowing or irrigating, and humans lived off the land, enjoying a healthy and virtuous existence in harmony with nature and with each other. The human population ate only what was in abundance – acorns and honey..." The pine cones at *Il Sacro Bosco* are "from the pine trees sacred to Pan, god of woodlands, and also to Bacchus, god of wine, through which association they became a symbol of regeneration. The phallic shape and large scale of both serve to emphasize the fertil-



Figure 37. Guerra's Drawing of the Hippodrome. Image taken from Claudia Lazzaro's *The Italian Renaissance Garden.*

ity of the earth."[4]

The hippodrome, like the acorns and pine cones, is a form given authority from antiquity. During the Renaissance it was used as another way to divide the garden into a basic unit. The garden was a reflection of the cosmic order in the universe. "...Gardens are images of an ideally ordered nature...the whole composed of regular geometric units. In this sense as well the concept of third nature must be understood: the garden is another nature structured by human intellect to reveal the order inherent in nature."[5] The geometric figures in the garden were a visual expression of the harmony between the microcosm and the macrocosm. We cannot be certain of how the plantings in the garden of simples on the hippodrome were arranged, but it was common at the time to separate the planting beds into different compartments, as at Villa Lante and at Caprarola. It is interesting to note that at both Villa Lante and Caprarola, the bosco was separated from the main formal garden; however, in *Hypnerotomachia Poliphili*, the Island of Cytherea (fig. 38) has three outer rings of boschi and the three inner rings containing beds for herbs and flowers with elaborate compartment designs (fig. 39). Like *Il Sacro Bosco*, the garden of simples is contained within the bosco instead of being separated from it. The hierarchy and subdivision of the whole into units shows the order inherent in nature, not imposed on it.

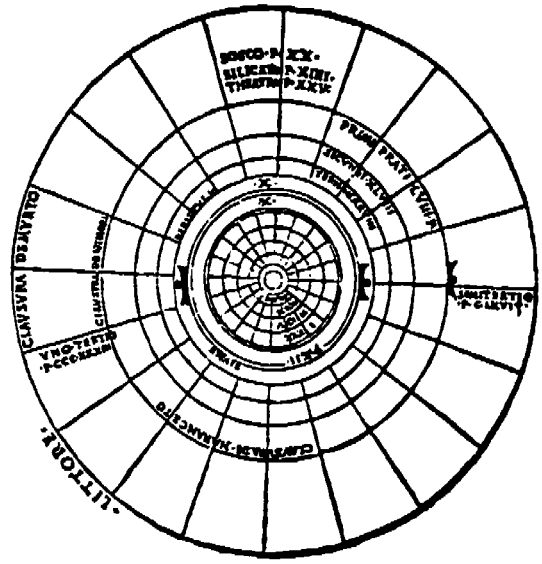


Figure 38. Island of Cytherea in *Hypnerotomachia Polifili*. Image taken from Claudia Lazzaro's *The Italian Renaissance Garden*.

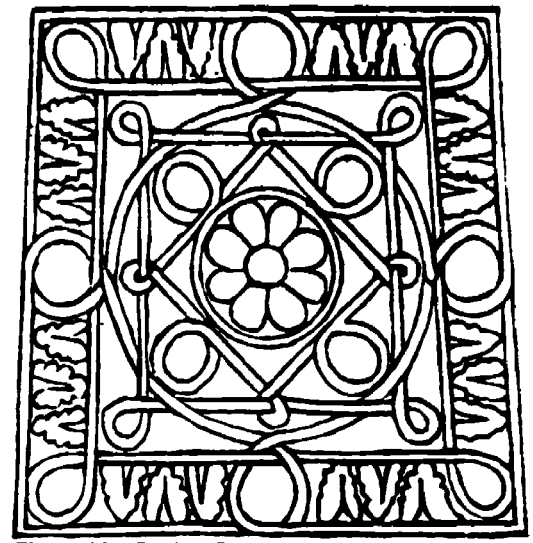


Figure 39. Garden Compartment Design in *Hypnerotomachia Poliphili*. Image taken from Claudia Lazzaro's *The Italian Renaissance Garden*.

The parts' relationship to the whole relates to the definition of love in that it is a direct

concern in the definition of beauty. It has already been mentioned that Ficino's *Commentary on Plato's Symposium on Love* is more of a compilation of different ideas on love rather than just a neoplatonic commentary. When defining beauty, Ficino had to combine the Christian/platonic definition of beauty as an abstract universal existing in God's mind with the Aristotelian definition as an abstraction formed in the human mind as a result of many particular sense experiences.[6] He compromises by saying that beauty is a grace infused into a thing by God, but the body must prepare itself with

> "three things: Arrangement, Proportion, and Aspect. Arrangement means the distances between the parts, Proportion means quantity, and Aspect means shape and color....The basis of these is a temperate compexion of the four elements, so that our body may be much like heaven, the substance of which is temperate, and will not rebel, through some excess of humors, against the soul's shaping of it. For in this way both the heavenly splendor will easily shine in a body which is like heaven, and that perfect Form of Man which the Soul possesses will turn out more clearly in matter which is pacified and obedient....beauty is a certain lively and spiritual grace infused by the shining ray of God, first in the Angel, and thence in the souls of men, the shapes of bodies, and sounds; a grace which through reason, sight, and hearing moves and delights our souls; in delighting, carries them away, and in carrying them away, inflames them with burning love."[7]

Despite this, Ficino says that beauty does not consist in a certain arrangement of parts. He thinks is is absurd to think that things which are not beautiful of their own nature give birth to beauty if arranged properly. Beauty is incorporeal. To further explain this, Ficino says that desire is quenched after one possesses what was desired. Yet, "love is not satisfied by any seeing or embracing of a body. Therefore love does not seek any nature of a body; it certainly does seek beauty. Whence it happens that it cannot be anything corporeal."[8] God infuses everything with His beauty, thus everything is connected through his love. It is up to man to arrange the already beautiful parts to reflect the order of the cosmos. Again, the garden is ordered nature.

It may be remembered that Vicino Orsini's letters talk about recipes for curative herbs to alleviate stomach troubles or prolong life. Because everything in the universe is connected, even the plants, rocks, and soil of the garden are infused with a heavenly countenance. According to Ficino, when used properly, these substances can "draw down these heavenly things...making the lower things in agreement with the higher....This is done with a certain

art, gathering many things into one, corectly and appropriately....many things of this kind, when they are gathered, chopped up, mixed together, and digested under a certain star according to medicine and astrology, start the rays acting inside, and thus these things become heavenly."[9] With the garden of simples, *Il Sacro Bosco* becomes a cure for the soul through the body.

The statue of Proserpine, the daughter of Ceres commited to stay in the underworld with Pluto for half of the year, wears a crown with half moons. Her arms are spread welcoming all to the terrace and her body turns into a bench. Darnall and Weil say that she is another harpy representing "a final trap for the unwary soul." [10] But, the Harpies in *Orlando Furioso* are hideous creatures with long talons. The statue of Proserpine has a calm, beautiful, welcoming face. The half-moons on her crown identify her "as being one of the manifestations of the'Triple-Goddess' Hecate – Luna in Heaven, Diana on earth, and Proserpine in Hades."[11]



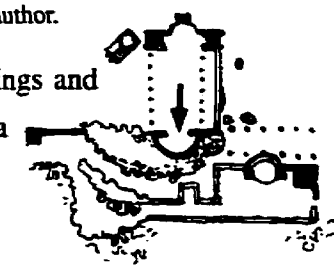
Figure 40. Mermaid with Lions. Photo by author.

The other end of the Hippodrome is framed with two small bears, one holding a rosette, the other holding the Orsini coat of arms. The bear, *orso*, is small compared to the size of the rosette so it becomes a play on the owner's name, *orsino*.

Behind the small bear statues is the grouping of two females, one with bifuracted fish-tails (fig. 40), the other with a wing, tail and claws(fig. 41). There are two lions sitting in between them. Darnall and Weil relate this grouping to the harpies in Orlando Furioso that threaten the Christian Prester John, the King of Ethiopia. Astolfo uses magic to chase the harpies into hell, rescuing Prester John.[12] However, as J. B. Bury points out, Ariosto's harpies are more hideous than corpses, with wings and claws. The female with bifurcated fish-tails and without wings is a



Figure 41. Harpy. Photo by author.



mermaid. "These have always represented temptresses as opposed to harpies which have invariably been characterized as cruel, rapacious predators sent to punish human beings who have commited crimes."[13] So, J.B. Bury reads the grouping as Temptation (to sin) and Punishment (for sinning). Despite my resistance to an overmoralistic view of the garden, this is a convincing interpretation. If tempted by passion that is not noble, there will be punishment. But, this is not saying that all sensuous pleasure is evil. On the first terrace we learned that Earthly Love is praiseworthy because it is the desire to procreate the divine beauty of God in lower things. But Ficino asks what is censured in love?

> "If anyone, through being more desirous of procreation, neglects contemplation or attends to procreation beyond measure with women, or against the order of nature with men, or prefers the form of the body to the beauty of the soul, he certainly abuses the dignity of love. This abuse of love Pausanius censures. He who properly uses love certainly praises the form of the body, but through that contemplated the higher beauty of the Soul, the Mind, and God, and admires and loves that more strongly. And he uses the office of procreation and intercourse only as much as the natural order and the civil laws laid down by the prudent prescribe."[14]

In the next Speech, Ficino goes on to explain that "the desire to propagate one's own perfection is a certain type of love...The same instinct for propagation is infused into all things by that first author. Through this instinct the holy spirits move the heavens and distribute their gifts to all inferior beings. Through this, the stars scatter their light through the elements. Through this, fire moves air by communicating its own heat, air moves water, and water, earth. And vice versa, earth attract's water to itself, and water air, and air fire; and all herbs and plants, desiring to propagate their own seed, bear things like themselves. Brute animals also, and men, are led to procreate progeny by the enticements of the same desire."[15] Love leads superior things to care for inferior things and inferior things to turn toward greater and higher things.

We turn to our right, walking along a path with a hill on the right side and glimpses of the path on the second terrace on our left. We pass the back of the statues of the Fighting Giants, and from our elevated position we can see their armor more clearly. On the right of us is a bench with the Lante della Rovere family crest. It was added to the garden when they bought the Orsini castle in 1645.

Beyond this is the Fallen Temple (fig. 42) "with a tympanum containing reliefs of a triton

carrying an oar and blowing a horn, a mermaid, and a ram-headed fish in the corner."[16] The form of the temple and the relief are Etruscan in style, similar to the Etruscan tombs that dot the surrounding hillsides of Bomarzo. The form of the Fallen Temple with its tympanum also recalls the Polyandrion in *Hypnerotomachia Poliphili* (fig. 43). The high priestess in the Temple of Venus Physizoa says an Etruscan prayer,



Figure 42. The Fallen Temple. Photo by author.

and instructs Poliphilo to extinguish Polia's torch in the cistern. She completes the ceremony with sacrifices and eventually a feeding from a miraculous rose-bush. Then, she sends the lovers on their way to wander along the seashore. They come across the Polyandrion, which was dedicated to the triple-formed Pluto. Polyandrion means graveyard, it is a place where unhappy lovers are buried. While Poliphilo and Polia are waiting for Cupid, who will carry them to the Island of Cytherea, Poliphilo is overcome with desire for Polia. Aware of this, Polia suggests that he study the Polyandrion since he enjoys things from Antiquity.. One of the inscriptions he finds in a temple reads, "Sacred to the triple-bodied Pluto, he who is within, to his beloved spouse, Proserpine, and the three-headed Cerberus."[17] This inscription recalls our beginning on the third terrace of *Il Sacro Bosco* with Cerberus and Proserpine. A mosaic Poliphilo finds "tells that those who have loved too ardently are condemned to eternal flames in this place,

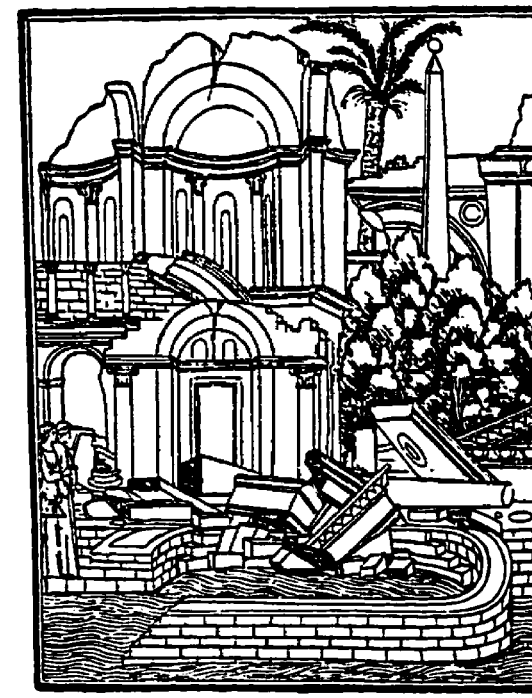


Figure 43. Polyandrion in *Hypnerotomachia Polifili*. Image taken from Linda Fierz-David *The Dream of Poliphilo*.

while those are plunged into ice who were lukewarm, and have offered unfeeling resistance to love."[18] He then comes upon the multitude of graves of unhappy lovers. Like the lessons of many statues in *Il Sacro Bosco*, Love that is too ardent is punished (the harpy and mer-

maid), but love should also not be too cool (the lessons of the nymphaeum and the double nature of Venus). After seeing a relief depicting the rape of Proserpine, Poliphilo fears for Polia's safety and runs back to her. The Fallen Temple in *Il Sacro Bosco* recalls a desire to return to Antiquity, a point which will be further explained at the next statues.[19]



Figure 44. Janus. Photo by author.

As we continue along the path we see the end, another open-mouthed monster head similar to the Mouth of Hell but with a globe and a castle on his head. Before we arrive in front of him, we pass six statues, two with one face each, two with two faces (fig. 44) and the other two with four faces (fig. 45).[20] "Janus, god of time who sees past and future, is regularly represented as bifrons, that is with two faces looking in opposite directions; and the four-faced -quadrifrons – heads are here characterized as four ages: a smooth-faced youth, a mustached man in his prime, a deeply seamed but still vigorous face, and the withered bearded head of old age."[21] Janus was the mythical founder of the Etruscan people and presided over the Golden Age in Latium. Giovanni Nanni da Viterbo claimed the Orsini family traced its ancestry back to the time of Janus. Giovanni Nanni da Viterbo published the *Antiquities* in 1498, composed of both authentic and forged antique texts chronicling the life of Janus. Orsini's friend and family historian Francesco Sansovino translated Nanni's texts and verified the Orsini's family glory



Figure 45. Janus -quadrifron. Photo by author.

in ancient Etruria. Esther Gordon Dotson explains that in the texts, Janus was identical with the biblical Noah. He was the founder-teacher-priest of the Golden Age after the flood. To escape contradiction, Nanni explains that the pagan gods were actually just heroes of early people, who were later worshipped in corrupted cults. "Janus thus became, in Nanni's reconstruction, the predecessor and father of the whole classical pantheon....That Nanni's native Viterbo, one of the Etruscan sacred cities, could thus be seen as surpassing Rome in dignity and antiquity was no doubt one of the intended by-products of his historical fabrication."[22] Janus was presented as a master of astronomy who could move the heavens and elements. The Janus quadrifron represents the turning of the four seasons, the different faces symbolizing the passage from winter to spring. So, as Dotson points out, the Janus in *Il Sacro Bosco* represents two kinds of time: one, relating present man to the past, and the other placing him within the seasons and the ages of man.

The statues of Ceres and Proserpine have already related love to the changing of the seasons – they are a direct result of the desire of Pluto to keep Proserpine in the underworld for half of the year. Love is also related to Time in that "Love is both older and younger than the other gods."[23] God, the father of all things, created Minds out of love of propagating his own seed. And the Minds–from the moment they are born– love their creator. "That love by which the celestial beings are created we call 'older' than they; but that with which the creatures love their creator we call 'younger'....Love is the beginning and end, the first and the last of the gods."[24]

Time, through Janus, is also related to love in the woodcuts in *Hypnerotomachia Poliphili*. In the first terrace of *Il Sacro Bosco* when describing the statue of Pegasus and relating it to Poliphilo's encounter with the statue of Pegasus, it was mentioned that there were two reliefs on the horse's pedestal. The relief entitled "Time" shows men and women with double faces looking forward and backward. It has seven men and seven women in a circle with their arms interlocked in such a way that the women are holding the women's hands and the men are holding the men's hands. The interior faces are happy, looking toward each other, but the exterior faces are sad, not able to see the other's presence. The expressions on the Janus-like faces are related to love. Love is partly rich and partly poor. "On the birthday of Venus, while the gods were feasting, Porus, the son of Counsel, drunk with nectar, lay with Penia in the garden of Jupiter. From this union was born Love."[25] *Porus* means plenty and *Penia* means poverty. The interior faces are rich, happy, in the presence of

others; the exterior faces are poor, in isolation. The other relief on the statue of Pegasus helps to further explain the nature of love as partly rich and partly poor. The relief entitled "Loss" shows men and women picking flowers. They had a desire, they are "plucking" it, and the desire is gone - Loss.



Figure 46. Orc. Photo by author.

> "Why is love partly rich and partly poor? Because we are not accustomed to desire that which we completely possess or that which we completely lack. For since everyone seeks that which he does not have, if a person possesses the whole thing, what more can he want? But also, since no one wants things which are unknown to him, anything that we love must necessarily have been known to us beforehand in some way....Therefore, since lovers certainly partly have what they desire but partly do not have it, love is not inappropriately mixed of a certain poverty and plenty."[25]

The forehead of the horse is entitled "Generations," which like the Janus head statues in *Il Sacro Bosco*, reminds us that the presence of Love is eternal. It continues not only through the generations of the seasons, but through time, through the generations of people.

The final statue on the third terrace is the Orc with the globe on its head (fig. 46). A castle is sitting on top of the globe with a carving of the Orsini rose below it. The castle is the Orsini castle, thus establishing their place in the world as a powerful family linking the world to the heavens. The orc's cheeks and lips end in waves associating it with the sea, close to the underworld. It is another reminder of the hierarchy that places the Orsini family close to the top, close to the Divine. This statue is strangely isolated from the rest of the garden. It is at the end of a long path, perhaps marking the boundary of the garden.

Now, we must turn around walk past the Janus heads, the Fallen Temple, along the path to

the harpy and mermaid, past the Orsini bears, and through the hippodrome. We see Proserpine waiting for us at the end of the hippodrome.

On the wall to the left of Proserpine, there is an inscription that reads,

> CEDAN ET MEMPHI ET OGNI ALTRA MARAVIGLIA
> CH HEBBE GIAL MONDO IN PREGGIO AL SACRO BOSCO
> CHE SOL SE STESSO ET NVLL ALTRO SOMIGLIA
> Memphis and every other marvel
> that the world has held in praise yield to the
> *Sacro Bosco* that resembles itself and nothing else. (Darnall and Weil, 63)

Like some other inscriptions in the garden, this inscription establishes the uniqueness of the garden, but more importantly it names the garden as Sacred. The naming of the garden as Sacred should not be dismissed. A sacred site shows itself to us, it is not planned but rather discovered. As sacred, it represents another level of reality. It reflects a certain timelessness and allows communication with the Divine to be possible. The entire grove is named as sacred, not just one stone or one tree and not just the temple on the fourth terrace. Darnall and Weil would have us believe that the lower terraces represent a false paradise that we must turn away from in order to reach the divine, but since the entire grove is sacred, even the lower terraces allow communication with the Divine to be possible. The garden is like a door to the world above; through experiencing the statues, time stands still and one comes to understand the Divine.

Again, it is only through the experience of the garden that communication is possible. Orsini has purposely placed this quote on the third terrace within sight of the Temple. We have already experienced much of the garden. Rather than stating that the garden is sacred at the entrance, Orsini allows the garden to enable meaning to present itself. In this sense we are transported back to the Greek *chora*, or space, where participation is important. The experience of the garden is the ritual. The meaning of *Il Sacro Bosco* comes to us through embodiment; it can not be gained intellectually. Orsini's garden, as sacred, allows us to exist in a more-than-human world.

We catch one last glimpse of Proserpine and Cerberus before we ascend the stairs to the fourth terrace, the Temple of Divine Love (fig. 47).



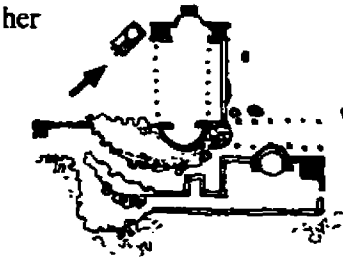
Figure 47. Temple as seen from Third Terrace.
Photo by author.



Figure 48. Temple. Photo by author.

We have ascended to the Temple of Divine Love, dedicated to Giulia Farnese Orsini (fig. 48). It is the unity of *Il Sacro Bosco*, the resolution of the many in the Supreme One. The temple is proof of the sacred nature of the garden. It represents another level of reality that allows us to transcend the everyday. It is the axis mundi that allows communication with the heavens. We observe that it is in the Tuscan order with a triple-aisled portico and an octagonal cella and dome. Vicino Orsini compared the dome to the dome of S. Maria dei Fiore in a letter written to Cardinal Alessandro Farnese in October of 1565.[1] Rosettes and lilies, symbols of the Orsini and Farnese families, decorate the coffers in the vault of the portico and stars decorate the coffers in the dome. Giovanni Guerra's plan of the "tempietto" shows that the sides were decorated with the signs of the Zodiac, the front facade was decorated with the Orsini and Farnese coat of arms and the east end of the temple facing the garden contained the Crucifixion and the Resurrection of Christ with the Sun in the center (fig. 49). The sun rises behind the temple where the sign of the sun is located. The temple is facing an open meadow. From the clearing at the front of the temple we can see the town of Bomarzo and the Orsini Castle in the distance to our left.

We notice that the temple is not perpendicular to the terraces below. From the overall plan (fig. 2 on page 3), we can see that it is somewhat perpendicular to the Orsini Castle, but it is so far away, could there be another reason for its odd angle in relation to rest of the garden? Could the signs of the Zodiac placed on the sides of the Temple have something to do with the angle of the temple? Were the powers of the planets evoked through the zodiacal signs during the prayers said for Giulia Farnese's soul? I have already mentioned that Ficino believed that lower things could be influenced by the planets, since God infuses everything he creates with His ray of light.[2] The Renaissance universe's connection with and influence from the stars and planets was widely accepted. Even Vicino Orsini requested a Roman physician to do a complete character study for his daughter Oronthea at her birth. He also requested to learn of her future according to the exact hour and place of her birth.[3]



In his letter to Vicino of October 20th 1564, Annibale Caro refers to the temple as the Mausolei. From this, J. B. Bury says "there is only one logical inference: the Tempietto dedicated to Giulia and where masses were continuously said for her soul must contain her tomb (and eventually, it seems reasonable to guess, that of Vicino too)." He explains that their tombs can not be found at the local church in Bomarzo, which is paradoxical "in an age when so much importance was attached to projecting the memory of the deceased by sculptured portraits and long biographical notices engraved on funerary monuments."[4] So there could be a vault or crypt under the tempietto with the entrance on the third terrace protected by Cerberus. J. B. Bury continues the argument by saying that masses were said for Giulia's soul in the temple and there is no evidence that the ground was not consecrated. He also mentions the presence of the Crucifixion and Resurrection on the roundels facing the third terrace. This is an intriguing speculation that would give a reason for Cerberus, guardian of the underworld, to be placed on the third terrace and also give an explanation of the naming of the entire garden as Sacred. Now, with the garden culminating in the temple, Vicino's Earthly Love has lead him to Divine Love. Without travelling this path, we never would have understood how Earthly Love is part of the cosmic hierarchy. It is only through the experience of the garden that we have reached a higher level of understanding of the Divine through Love. The "chaos" of the lower terraces, the different narratives that were introduced, interchanged and sometimes stopped without a conclusion, help us to understand the unity of the final terrace. It is this unity from above that gives light to the statues below. "Love accompanies chaos, precedes the world, wakens the sleeping, lights the dark, gives life to the dead, gives form to the formless, perfects the imperfect. Greater praises than these can hardly be expressed or conceived."[5]

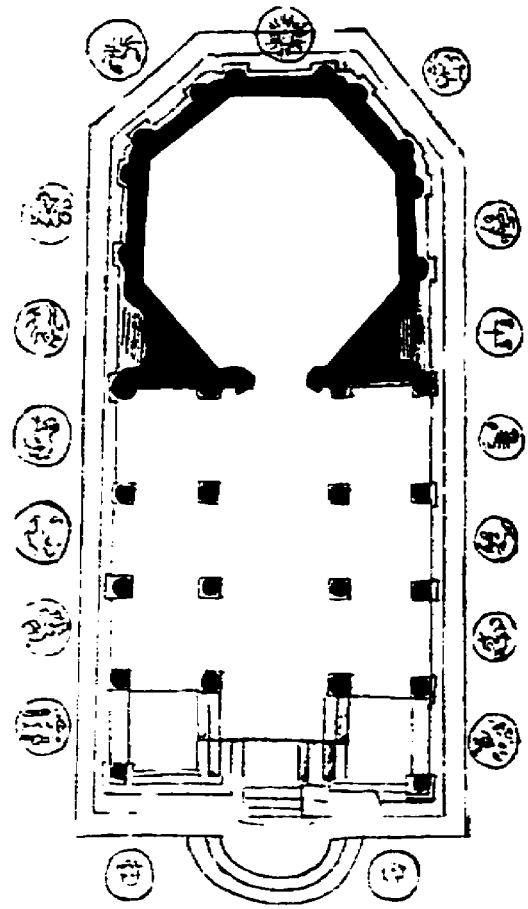


Figure 49. Plan of Temple by Giovanni Guerra. Photo from promotional material- *Guide to The Monster Park* by Giovanni Bettini, 1993.

I now want to go back and answer the question posed to us at the beginning of our journey through *Il Sacro Bosco*. The sphynx asks, "You who enter here, put your mind to it/ and tell me later whether so many marvels/ were made for deceit or only for art." Throughout the garden, hints were given toward an answer. The Three Graces could be seen on one level as the Giving, Receiving and Returning of Benefits, but on another level they were Beauty, Love and Pleasure. The Turtle with Fame on its back was a symbol for a popular Renaissance saying, "Festina Lente" (make haste slowly), but when looked at on a deeper level, it becomes a symbol for the paradox of how the many can be resolved in the One. It was a symbol for God and creation itself. Though the statues tell many different stories, there is a unity in the garden once the visitor reaches the temple. But, does a sphynx's riddle really have an answer? The answer lies somewhere in between deceit and art. Because the statues have many different layers of meaning, we might lean toward deceit. But it was common for art of the Renaissance to be deceiving, giving one meaning to some people and another meaning to another group of people. Traditionally art is defined as an effort to imitate nature; this mimesis in itself is "deceitful." But, in its deceitfulness it is a self-conscious artifice capable of revealing a superior truth (as indicated by the myrtle tree on the First Terrace). So in the garden, there is an exoteric meaning – the surface reading of the iconography of the statues – relating the statues to popular narratives of the time. And, there is the esoteric meaning that this thesis has attempted to understand. It takes into account the narratives, but goes deeper, searching for the significance behind the statues and the narratives. *Il Sacro Bosco* is a garden of lessons on Love. It teaches us of the paradox of love, the pleasure and pain, the bitter and the sweet, and even how the many can be resolved in the One. It teaches us of how the seasons are a direct result of desire and how we live in a constant state of desire, wishing to complete ourselves with our other half. The garden teaches us of our potential madness in losing ourselves when love is not returned, but it also teaches us of the pleasures of earthly love and how pleasure can be a noble passion. The statues of *Il Sacro Bosco* are a path that we must travel in order to reach the temple of Divine Love at the top. As mentioned at the Leaning House on the first terrace, ideas come to us not internally, through our mind alone, but externally through our surroundings. The origin of knowledge is in our body, in desire. *Il Sacro Bosco* communicates to us through the theme of Love.

It is now time to return to Rilke's words, "Faced with the unutterable, words still disintegrate.../And ever new, out of the most quivering/stones, music builds her divine house in useless space."[1] Oput of the stones of Bomarzo, a sacred grove was built. *Il Sacro Bosco* travels beyond the senses into the realm of desire, or Eros. Despite that our definition of Love may have changed since the Renaissance, it still involves the same principles. Love is desire. It is an attraction, a connection - Love unites us in its communicative dimension and asks us to participate. Eros, the erotic is one of the only genuine forms of communication today. If the origin of knowledge is in the senses, it can be said that the origin of meaning is in eros. Love is communication through communion. It is not a bridge, but a fusion between people.

But I must ask, have my words done justice to the meaning of *Il Sacro Bosco* ? In the end architectural meaning remains ambiguous. It involves something more-than-human that resists clarity through language. Ironically the analogy between Eros and knowledge has come full circle. Like desire, I have derived both pleasure from reaching and pain from falling short. Desire is not quenched; it remains. I now refer us back to Rilke,

> "You are so young, so much before all beginning, and I would like to beg you, dear Sir, as well as I can, to have patience with everything unresolved in you heart and to try to love *the questions themselves* as if they were locked rooms or books written in a very foreign language. Don't search for the answers, which could not be given to you now, because you would not be able to live them. And the point is, to live everything. *Live* the questions now. Perhaps then, someday far in the future, you will gradually, without even noticing it, live your way into the answer. Perhaps you do carry within you the possibility of creating and forming, as an especially blessed and pure way of living; train yourself for that - but take whatever comes, with great trust, and as long as it comes out of your will, out of some need of your innermost self, then take it upon yourself, and don't hate anything."[2]

Our journey through the garden has come to an end. We must leave this place in order to *live the question.*

[12] Darnall and Weil, 63.
[13] Bury, "Review Essay: Bomarzo Revisited", 217. In J. B. Bury's essay "The Reputation of Bomarzo", he shows the title pages for Sansovino's edition of Sannazaro's *Arcadia* with a woodcut headpiece ornament of a mermaid with two tails.
[14] Ficino, *Commentary*, 1985, 54.
[15] Ibid., 64-65.
[16] Darnall and Weil, 15.
[17] Fierz-David, 138.
[18] Ibid., 140.
[19] I of course am not suggesting that the Fallen Temple is a nostalgic return to an ideal paradise as in the English 18th century gardens, rather a sincere desire to connect with their past and surpass their ancestor's achievements.
[20] These were obviously moved here from elsewhere. Darnall and Weil say that they were found above the retaining wall of the love theatre when a survey was done in 1955. Since the statues original placement has not been confirmed, I have chosen to talk about them in their present location.
[21] Dotson, 213.
[22] Ibid., 214.
[23] Ficino, *Commentary*, 1985, 98.
[24] Ibid., 99.
[25] Ibid., 116.
[26] Ibid., 117.

CONCLUSION

[1] Darnall and Weil, 70 and Lazzaro, 130.
[2] In Marsilio Ficino's *Book of Life* he mentions the use of talisman's to influence men's spirit. The talisman could be a stone carved with a word or figure relating it to a specific planet. They are only effective with the presence of a human who understands their significance thus influencing the spirit through a celestial connection. Of course Ficino is translating Hermes Trismegistus and only suggests using this for subjective or medicinal purposes. Although the signs on the temple are not talismans that can be held in one's hands, they do provoke a similar influential connection with the planets.
[3] Trubiano, 4.
[4] Bury, "Review Essay: Bomarzo Revisited", 218-219.
[5] Ficino, *Commentary*, 1985, 40.

EPILOGUE

[1] Rainer Maria Rilke, *Duino Elegies and the Sonnets to Orpheus*. Trans. A. Poulin, Jr. (Boston: Houghton Mifflin Company, 1977), 157.
[2] Rainer Maria Rilke, *Letters to a Young Poet*. Trans. Stephen Mitchell. (New York: Vintage Books, 1986), 34-35.

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PROLOGUE

[1] Rainer Maria Rilke, *Duino Elegies and the Sonnets to Orpheus*. Trans. A. Poulin, Jr. (Boston: Houghton Mifflin Company, 1977), 157.
[2] Juhani Pallasmaa, "Six themes for the next millennium", *Architectural Review*, no. 1169 (July 1994), 79.
[3] Influenced by Alberto Pérez-Gómez, "The Hypnerotomachia Poliphili by Francesco Colonna: The Erotic Nature of Architectural Meaning," In *Paper Palaces: The Rise of the Renaissance Architectural Treatise*, edited by Vaughan Hart. (New Haven and London: Yale University Press, 1998), 86-104.
[4] Refer to Anne Carson, Eros the Bittersweet, (Normal, IL: Dalkey Archive Press, 1998), 81.

INTRODUCTION

[1] Claudia Lazzaro, *The Italian Renaissance Garden: From the Conventions of Planting, Design, and Ornament to the Grand Gardens of Sixteenth-Century Central Italy*, (New Haven, CT: Yale University Press, 1990), 70.
[2] Ibid., 8.
[3] There is speculation that at one time there was a formal garden on the slope down from the castle. Claudia Lazzaro explains that aerial photographs show lines in the soil, possibly walls for terraces, but there is no physical evidence showing that the formal garden was there during Vicino Orsini's time. In fact, Giovanni Guerra and Bartholomaus Breenbergh visited the garden respectively in 1604 and 1625, and neither did drawings of a formal garden; instead the boschetto itself was referred to as the garden. See Lazzaro, 122.
[4] Ibid., 124.
[5] Ibid.
[6] Franca Trubiano, "Il Sacro Bosco di Bomarzo and the Letters of Vicino Orsini," (Paper for Reading and Writing, Sights-Sites Class with John Dixon-Hunt at University of Pennsylvania, 1996), 13-14.
[7] J.B. Bury, "Review Essay: Bomarzo Revisited." *Journal of Garden History*. Vol. 5 no. 2 (1985), 217. Some authors write that Orazio Farnese was Giulia's brother, not cousin. Lazzaro, 139.
[8] Trubiano, 22.
[9] Lazzaro, 122.
[10] Hippodrome is a Greek term for the architectural setting of horse and chariot races. Pliny's hippodrome included plots of grass divded by paths. Lazzaro, Chp.4.
[11] J.B. Bury, "Some Early Literary References to Italian Gardens," *Journal of Garden History*, Vol. 2 no. 1 (1982), 19.
[12] J.B. Bury, "The Reputation of Bomarzo," *Journal of Garden History*, Vol. 3 no. 2 (1983), 108.
[13] Bury, "Some Early Literary References to Italian Gardens," 20.
[14] Lazzaro, 123.
[15] Ibid., 138.
[16] M.J. Darnall and M.S. Weil, "Il Sacro Bosco di Bomarzo: its 16th-century literary and antiquarian context," *Journal of Garden History*, Vol. 4 no. 1 (1984), 5.
[17] Ibid., 13.
[18] Alberto Pérez-Gómez, "The Hypnerotomachia Poliphili by Francesco Colonna: The Erotic Nature of Architectural Meaning," in *Paper Palaces: The Rise of the Renaissance Architectural Treatise*, ed. Vaughan Hart (New Haven and London: Yale Univeristy Press, 1998) , 99.
[19] Marsilio Ficino, *Commentary On Plato's Symposium*. Trans. Sears Reynolds Jayne, A.M. (Dallas: Springs Publications, Inc., 1985), 68.
[20] John Charles Nelson, *Renaissance Theory of Love: The context of Giordano Bruno's Eroici furori*. (New York and London: Columbia University Press, 1958), 83.
[21] Lazzaro, 10.
[22] Sears Reynolds Jayne, Introduction to Ficino, *Commentary*, 1985, 20.

[23] Ficino, *Commentary*, 1985, 41.
[24] Anne Carson, *Eros the Bittersweet*, 1986. (Normal, IL: Dalkey Archive Press, 1998), 10.
[25] Ibid., 170.
[26] Pérez-Gómez, *Paper Palaces*, 96.
[27] Ibid., 93.
[28] Carson, 77-82.
[29] Edgar Wind, *Pagan Mysteries in the Renaissance*, (New Haven: Yale University Press, 1958), 197.

THE FIRST TERRACE

[1] There is much debate concerning the original entrance to the garden. Margaretta J. Darnall and Mark S. Weil maintain that there was a bridge over the dam near the fighting giants but there is no strong evidence to support this. I believe that the original entrance was near the leaning house, which is close to being on axis with the castle.
[2] Original inscriptions copied from author's notes during visit to the garden in September of 1998.
[3] Unless otherwise noted, all translations are taken from M.J. Darnall and M.S. Weil, "Il Sacro Bosco di Bomarzo: its 16th-century literary and antiquarian context," *Journal of Garden History*, Vol. 4 no. 1 (1984).
[4] A letter in 1565 indicates that the upper part of the house started to slide off and was repaired with pins. Esther Gordon Dotson, "Shapes of earth and time in European gardens," *Art Journal*. 42 (1982), 212.
[5] Translated by Claudia Lazzaro, 128. Darnall and Weil translate it as "If quieted the soul acts in a wiser fashion." 37.
[6] Terry Comito, *The idea of the garden in the Renaissance*, (New Jersey: Rutgers University Press, 1979), 65.
[7] Ibid., 82.
[8] Ficino, *Book of Life*, 20.
[9] Ibid., 59-61.
[10] Ficino, *Commentary On Plato's Symposium*, Trans. Sears Reynolds Jayne, (Columbia: University of Missouri, 1944), 202.
[11] Bury, "Review Essay: Bomarzo Revisited," 214.
[12] Darnall and Weil, p38. Franca Trubiano points out this moral spin in her paper, "Il Sacro Bosco di Bomarzo and the Letters of Vicino Orsini." Paper for Reading and Writing, Sights-Sites Class with John Dixon-Hunt at University of Pennsylvania, December 20,1996.
[13] Ficino, *Commentary*, 1944, 141-143. The 1985 translation names the two Venuses as "Heavenly and Vulgar", obviously taken from the Latin Vulgarem, defined as: associated with the common people. I have chosen to use the older translation of "Earthly" because our connotation of the word vulgar is: something that is offensive. This is interesting considering the view of the garden as an earthly paradise that is vulgar (offensive) that I am arguing against.
[14] Wind, 139.
[15] Marsilio Ficino, *Book of Life*, Trans. Charles Boer, (Woodstock, CT: Spring Publications, 1980), 69.
[16] Darnall and Weil, 28-31.
[17] Ibid., 31.
[18] In Plato's *Phaedrus*, Socrates explains that while mortals have named desire "eros", the gods say that desire entails a wing growing capacity and have named it "pteros", the winged-one. Indeed, the erotic experience does soar through our lives on wings. "...and when he that loves beauty is touched by such madness he is called a lover. ...as soon as he beholds the beauty of this world, is reminded of true beauty, and his wings begin to grow; then he is fain to lift his wings and fly upward; yet he has not the power, but inasmuch as he gazes upward like a bird, and cares nothing for the world beneath, men charge it upon him that he is demented." (Plato, *Phaedrus*, Trans. R. Hackforth, (Cambridge: Cambridge University Press, 1952), 92.) It is with desire's wings that we are able to ascend to the Beauty of the Divine.
[19] Ibid., 28.

[20] Lazzaro, 136.
[21] Linda Fierz-David, *The Dream of Poliphilo: The Soul in Love*, Trans. Mary Hottinger (New York: Pantheon Books, Inc., 1950), 141.
[22] P. Couliano, *Eros and Magic in the Renaissance*, Trans. Margaret Cook, (Chicago: University of Chicago Press, 1987), 5.
[23] Pneuma is literally 'fiery breath'. It is the Spirit, the World-Soul of which Earthly Love was born.
[24] Ibid., 31.
[25] Ficino, *Commentary*, 1985, 57.
[26] Because our spirit is made of the same substance as the stars, this allows for the magic of the Renaissance to be possible, starting with Ficino's use of talismans and ending with Giordano Bruno's manipulation of the beloved.
[27]Ficino, *Book of Life*, 96.
[28] Darnall and Weil, 25, 27.
[29] Ibid., 27.
[30] This is paraphrased from Francesco Colonna, *Hypnerotomachia, the strife of love in a dream*, Abridged English Edition, Trans. Robert Dallington (London 1592; reprinted New York: Garland Pub., 1976), 38.
[31] Elisabeth MacDougall, "Ars Hotulorum: Sixteenth Century Italian Garden Iconography," in *The Italian Garden*, ed. David R. Coffin (Washington, D.C.: Dumbarton Oaks, 1972), 55.
[32] Ibid., 58.
[33] Ficino, *Book of Life*, 5.
[34] Ficino, *Commentary*, 1985, 84.
[35] Ibid., 85.
[36] Wind, 17-18.
[37] Ficino, *Commentary*, 1944, 134
[38] Wind, 47.
[39] Ibid., 66-67.
[40] Ibid., 71.
[41] Ficino, *Commentary* , 1944, 167.
[42] Darnall and Weil, 20.
[43] This is paraphrased from Francesco Colonna, *Hypnerotomachia, the strife of love in a dream*, 67.
[44] Tracey Eve Winton, "Why Architects Wear Black..." (Thesis submitted to Department of Architecture (History and Theory) for McGill University, 1996), 76, 77.
[45] Ibid., 78.
[46] Darnall and Weil, 20.
[47] S. Lang relates it to Jean Cousin's *Book of Fortune* in which Fortune is standing on a Tortoise, and Vassari's frescoe in Palazzo Vecchio where fortune holds a tortoise under her arm. S. Lang, 'Bomarzo', *Architectural Review*, 121(June 1957), 427-430. This image can also be related to an image of Venus placing her foot on a tortoise teaching that women should remain at home and be chary of speech in Jean Seznec, *The Survival of the Pagan Gods: The Mythological Tradition and Its Place in Renaissance Humanism and Art* (Princeton: Princeton University Press, 1953), 101.
[48] Wind, 97.
[49] Wind, 98, 103-104.

THE SECOND TERRACE

[1] Ficino, *Commentary*, 1985, 72.
[2] Ibid.
[3] Wind, 133.
[4] Ficino, *Commentary*, 1944, 144.
[5] Ibid., 145.
[6] Carson, 149.

[7] S. Lang, 427.
[8] Lazzaro, 142.
[9] Colonna, 34.
[10] Claudia Lazzaro, "The Visual Language of Gender in Sixteenth-Century Garden Sculpture," In *Refiguring Woman: Perspectives on Gender and the Italian Renaissance*, edited by Marilyn Migiel and Juliana Schiesari (Ithaca, N.Y.: Cornell University Press, 1991), 95.
[11] Darnall and Weil, 41. They have that the inscription reads NOTTE ET GIORNO/NOI SIAM VIGILI/ET PRONTO/A GUARDAR D OGNI/INIURIA QVESTA/FONTE, "Night and day we are vigilant and ready to guard this fountain from any injury."
[12] Ibid.
[13] Fierz-David, 39.
[14] Paraphrased from Colonna, 30.
[15] Lang, 427.
[16] Bury, "Review Essay", 215.
[17] Lazzaro, 134.
[18] Bury, "Review Essay", 215, 217.
[19] All of the translations of the inscrptions in this section come from Fierz-David, 39.
[20] Colonna, 17.
[21] Darnall and Weil, 45, 47.
[22] Fierz-David, 44.
[23] See Maurizio Calvesi, *Il Sogni di Polifilo Prenestino*, (Rome: Officina Edizioni, 1983).
[24] Peréz-Gómez, *Paper Palaces*, 98.
[25] Pérez-Gómez, *Polyphilo or The Dark Forest Revisitied Introduction*, 18.
[26] Darnall and Weil, 41.
[27] Ovid, *Metamorphoses*, Trans. A. D. Melville (Oxford and New York: Oxford University Press, 1986), 125.
[28] Bury, "Review Essay", 217.
[29] Darnall and Weil, 53.
[30] Peter V. Marinelli, "The Flight of Ariosto's Hippogriff," in *Ficino and Renaissance Neoplatonism*, Edited by Konrad Eisenbichler and Olga Zorzi Pugliese (Ottawa: Dovehouse Editions Canada, 1986), 90.
[31] Ibid, 94.
[32] Darnall and Weil, 47.
[33] Ibid.
[34] Bury, "Review Essay," 217.
[35] Ficino, *Commentary*, 1985, 168.
[36] Ibid., 169.
[37] Ibid., 170-171.

THE THIRD TERRACE

[1] Dante, *Hell*, vol. I of *The Divine Comedy*, Trans. Dorothy L. Sayers, (London: Penguin, 1949), 104.
[2] Ovid, 166.
[3] Wind, 259.
[4] Lazzaro, 134-135.
[5] Ibid., 45.
[6] Ficino, *Commentary*, 1985, Inroduction by Sears Reynolds Jayne, 14.
[7] Ficino, *Commentary*, 1985, 93-95.
[8] Ibid., 89.
[9] Ficino, *Book of Life*, 135.
[10] Darnall and Weil, 57.
[11] Dorothy L Sayers glossary to Dante, *Hell*, 336.

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NORTH EROS

The Temple of Love at Gennevilliers

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A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements of the degree of Master of Architecture

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ABSTRACT

In 1750, the architect Giovanni Niccolo Servandoni built a Temple of Love in Gennevilliers, just north of Paris for the notorious libertine, the Duc de Richelieu. The new social freedom gained by the decline of the ancien régime gave birth to a democratic space that first appeared in the theatre and a personal freedom which changed the currents of thought on love. Servandoni's work as a painter, theatre designer and engineer of spectacles are promoted in the theory of Jacques-François Blondel and later Nicolas Le Camus de Mézières as prime examples of architecture in their theories of sensation. Libertine love, read through the literature of the time, clearly understands the limit of sensation and the "terrible state/loss of freedom" produced by real love. By general consensus an agreement to operate within the realm of sensation governs the ethics of libertine love and architecture. Servandoni's Temple of Love provides an ironic statement on love in the eighteenth century.

RÉSUMÉ

En 1750, l'architecte Giovanni Niccolo Servandoni a édifié un Temple de l'Amour à Gennevilliers, un peu au nord de Paris, pour un libertin notoire, le duc de Richelieu. De la nouvelle liberté sociale créée par le déclin de l'ancien régime sont nés un « espace démocratique », qui est d'abord apparu au théâtre, et une liberté individuelle, qui est venue changer les conceptions de l'amour. Dans leurs théories de la sensation, Jacques-François Blondel, puis Nicolas Le Camus de Mézières font des œuvres de Servandoni comme peintre, décorateur de théâtre et régisseur de spectacles une illustration de choix de ce que doit être l'architecture. Comme la décrit la littérature de l'époque, la conception de l'amour libertin fixe nettement les limites de la sensation et fait ressortir le terrible émoi et la perte de liberté que cause l'amour véritable. Une volonté générale d'habiter le domaine de la sensation régit l'éthique de l'architecture et des amours libertines. Le Temple de l'Amour de Servandoni témoigne sur le mode ironique de ce qu'était l'amour au XVIII^{e} siècle.

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INTRODUCTION

It is in the eighteenth century, the dawn of the French Revolution that we also find the origin of our present condition in architecture. Early in the eighteenth century, with the decay of the French regime and the flowering of the French Enlightenment, society found itself in a state much like zero-gravity: ultimate freedom and ultimately lost. The unquestionable authority of antiquity had been thrown into question in the mid-seventeenth century with Claude Perrault's interpretation of the touchstone of classical architecture, Vitruvius' *Ten Books of Architecture* and his own *Ordonnance for the Five Kinds of Columns after the Method of the Ancients.* But it was not until the eighteenth century that the radical ideas posited in these works came to bear on the minds and actions of architects. A sense that man could not only look to antiquity, but could improve upon it emerged. Man saw himself in an historical world; this historical man searched for his place, for a point of orientation, and found the empirical Nature of Newton as his guide.

Newtonian science stated that the *true* and the *rational* could be attained through observation and experimentation. The visual world revealed the true world and promoted the eye to a new status above and separate from the other senses. The Natural world provided the site where first principles could be found. From the sensible world could be abstracted the intelligible world. By the same token:

> *...relative, apparent and common time, is some sensible and external (whether accurate or unequable) measure of duration by the means of motion, which is commonly used instead of true time: such as an hour, a day, a month, a year.*[1]

And so is the case with space:

> *Absolute space, in is own nature, without any regard to anything external, remains always similar and immovable.*[2]

---

[1] Sir Isaac Newton quoted in Alexander Koyré, *From the Closed World to the Infinite Universe* (Baltimore, 1957), p 161.
[2] *Ibidem.*

In this context, the very nature of architecture and its role of disclosing the junction of the temporal (the event or ritual) and the spatial (the permanent structure which supports it),[3] providing orientation for humanity, suffered an assault. The spatio-temporal unity was fractured, and architecture has not recovered since.

The event that this thesis will investigate is love, a subject that exploded in the eighteenth century in literature, art and painting, in discussions in the salons, and in architecture. Love rests in the space of desire, in the erotic moment of space and time, like architecture. The frame that holds the event of love will be examined through the Temple of Love at Gennevilliers (1750) by Giovanni Nicolas Servandoni and the *petite maison* presented in the novel of the same name (1758) by the architect Jacques-François Blondel and Jean-François de Bastides.

Louis-François Armand de Vignerot du Plessis, the Maréchal Duc de Richelieu (1696-1788), was epitomized as the living registry of court etiquette, unscrupulous, and a passionate lover of theatre and food. His fame was due to his scandalous love escapades that are partly recounted in *Les Liaisons Dangereuses.*[4] In 1750, Richelieu employed the architect and theatre designer Servandoni to refurbish the gardens at his hunting lodge at Gennevilliers outside Paris. Preceding the wave of fashion for temples dedicated to love by nearly twenty years, Servandoni's Temple of Love reveals a potent interpretation of architecture reflecting the ideas of love in the eighteenth century. Today the monument remains only through memoirs, etchings and photographs (it was torn down in 1905) but is nonetheless telling of the intentions of the architect when seen within the context of his body of work.

Servandoni was not a theorist or a writer; essentially a man of the theatre, his work was bound to the events of the day, to spectacles and to carving out their

[3] Alberto Pérez-Gómez. *Polyphilo or the Dark Forest Revisited* (Cambridge, 1994), p xiv.

space in the public realm. He worked passionately with light, sound and movement to engage the beholder in an all-embracing experience. At Gennevilliers, the origins of this experience for the viewer lay in the realm of love, a site of ultimate union, and yet it holds an edge of irony, of self-awareness like that depicted in libertine literature: love the prison, love the elusive, love the desired. The seemingly perfect form and geometry of the building is set against the mercurial genesis wrought by architect and client.

The Temple was called both the Aurora Pavilion (Aurora being the goddess of dawn and hence guardian of border between dark and light) and the Temple of Love, with Eros, the deity that reveals boundaries (between reach and grasp)[5] at its helm. Crowned by a gilded statue of Mercury, who represents birth and death at once, which moved with the winds, the pavilion illuminates the world of the mid-eighteenth century, placing love at a crossroads. The work of Servandoni and his emphasis on the spectacle for "the eye" resonates with the libertine desire for freedom from convention and its restraints.

The libertine novella of 1758, *La Petite Maison*[6] by Jean-François de Bastide (with the likely collaboration of architect Jacques-François Blondel)[7] provides a counterpoint for the investigation of Servandoni's Temple of Love. Published only eight years after the Temple was built, the novel recounts the tale of a woman's seduction by the "petite maison" designed by her suitor, its calculated alleys and rooms designed with the "recipe of seduction," one step at a time. Richelieu's Temple of Love points to a different type of situation (one that resembled hunting) without the calculated progression of *La Petite Maison.* Although the outcome of the love pursuits that take place in its walls may be contrived to be the same (although in Bastide's first edition the woman is not

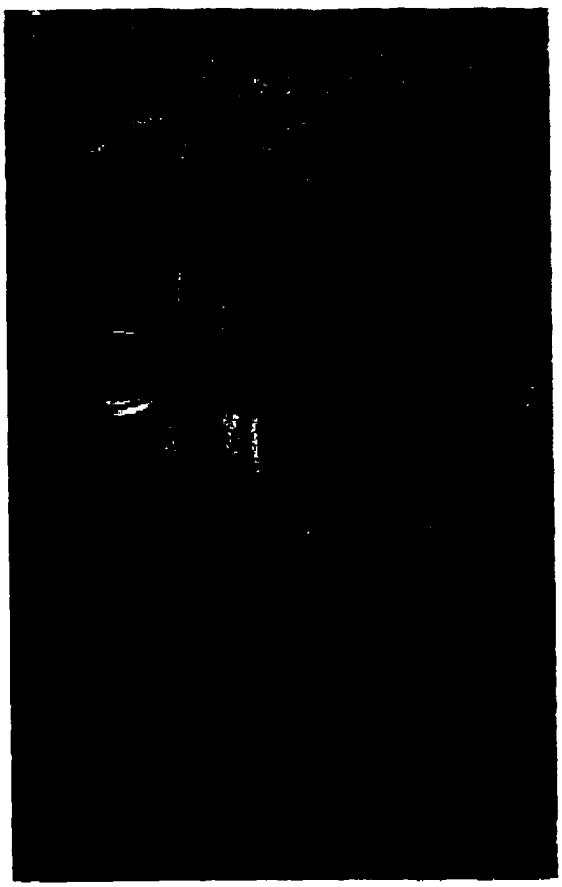
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[4] *Les Liaisons Dangereuses* was written by Choderlos de Laclos in 1782.
[5] Rachel Carson, *Eros the Bittersweet* (Princeton, 1986), p 30.
[6] I have used the translation by Rodolphe El-Khoury entitled *The Little House, an Architectural Seduction* (Princeton, 1996).

seduced in the end), its framework is not a total recipe. It borders both the rational and the irrational; like Mercury whose figure crowns its dome, the Temple of Love provides orientation but not a definitive map for its actors, improvisation but not a total script.

The story of love has been recounted in narratives that have been handed down through time in France. Their legends and the impact that they left in the lives of their readers contributed to the understanding of love, its arduous journey and its dangers.

[7] Anthony Vidler in his preface to *The Little House, an Architectural Seduction* bases this association on the history of joint publication and exchange of ideas between the two authors in other works.



1
The Temple of Sybil at Tivoli as an exalted ruin.

COMPLETE LOVE

Marsilio Ficino and Plato's Symposium in the Renaissance

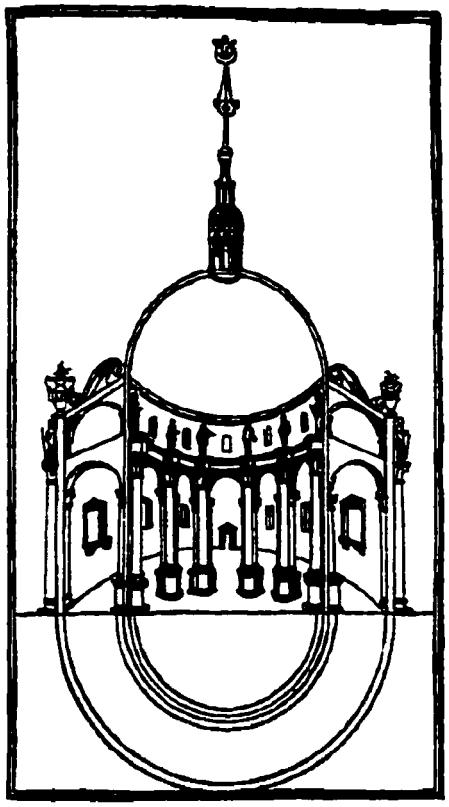
A key work on the subject of love for European cultural history is Plato's dialogue in the *Symposium* wherein Aristophanes recites the story of the birth of Love. The world once had three sexes whose form was circular and who each had four hands, four feet and two heads. There was a male, a female and an androgen. Due to their excessive pride, Zeus tired of these humans and decided to punish them by splitting them in half, leaving them with an eternal yearning to find their other half, a relentless journey fueled by love. Love is then a search, a perpetual journey, and a deep longing for union; it is the space between wisdom and ignorance. The form of this union is the circular whole – the original state of completeness.[8]

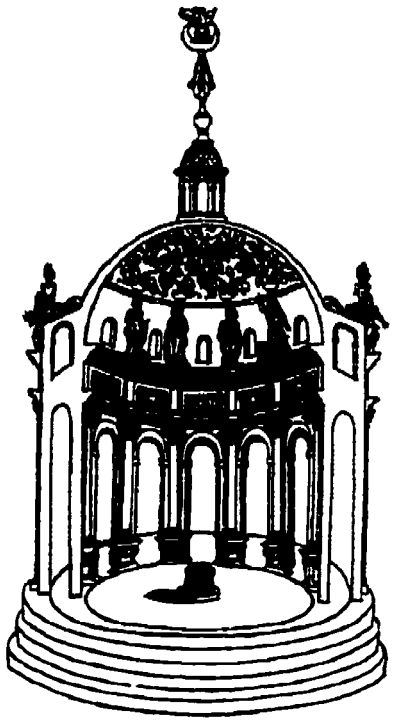
Vitruvius, in Book 4 of his *Ten Books of Architecture*, the first known architectural text (1 BC), includes the circular temple in his descriptions on the origin and ornament of the orders, temples, doorways and altars. The grouping of temples, doorways and altars provide a collection of types of thresholds. In the eighteenth century the circular Temple of the Sybil (or Vesta)[9] at Tivoli (fig.1) is visited and painted as the quintessential circular temple, the origins for the type. *Sybil* is the cavern-dweller and guardian of entrance to the underworld. The temple then celebrates the threshold to both love and death.

"To fall in love": the act of falling is one of release and freedom as well as one destined for an impact, perhaps fatal. Willingly or even unwillingly there is

[8] Plato. *The Symposium* translated by Walter Hamilton, (New York,1984). Marsilio Ficino, the Florentine renaissance philosopher in the court of the powerful Medici family, translated and wrote a commentary on much of Plato's work including the *Symposium* which was translated into the French in 1542. This contributed to the increasing zest for texts on the subject of love in France.

[9] In the eighteenth century, both names were attributed to this same circular temple at Tivoli.





2
The Temple of Love for Polyphilo and Polia

the act of initiating the fall, the space between of ultimate freedom, and the inevitable impact: bittersweet love.

Love, Narrative and the French Garden

Love in a garden was no new idea to the French; they could draw on a vast repertoire of images, Christian and Pagan, from the Garden of Eden to the "hortus conclusus." Since the thirteenth century the romantic narrative of the *Roman de la Rose* had located the garden as a place of love and discovery. In the sixteenth century France embraced the Italian Francesco Colonna's 1499 *Hypnerotomachia Poliphili, the Strife of Love in a Dream,* an architectural love narrative, and quickly published three French translations over only fifteen years. Further editions appeared in various forms in 1600, 1657 and 1772 and throughout these years it remained a staple in libraries, including that of Cardinal Mazarin, the educator of the young Louis XIV, influencing the design of gardens in France through to the eighteenth century such as at Fontainbleau and Luxembourg.[10] The Hypnerotomachia narrative describes a Temple of Love where, after an arduous journey, Poliphilo and his love Polia can realize their love. The Temple (fig.2) is circular, crowned by a dome with a lamp and a well which mark the *axis mundi.* The ceremony of love is presided over by Venus, and the alchemical fusion of fire and water mark the rite of love. Poliphilo is then confronted with death in the form of funerary monuments and fears for his life. The union, the collapse of the erotic space, is death.

Narrative, the telling of an adventure, is intimately woven into the fabric of the garden. Erotic knowledge, which is of the body, is at home in the garden. While each part of the garden has its place in the eighteenth century – the *voluptas* or pleasure garden adjacent to the chateau and the *utilitas* or vegetable garden hidden to the eye at the side – all contribute to the knowledge of the garden through the freshness of the senses. Bernard Pallisy, in his *Belle*

[10] Denise and Jean-Pierre Le Dantec, *Reading the French Garden* (Cambridge, 1993), p 57.

Jardinière notes that the garden "brings up out of the ground a sensual, cosmetic, and erogenous cartography."[11]

In the early eighteenth century, the garden in France was a place of pleasure and action, a site of events whose embellishments came to include pavilions, or follies, which served as sites in the journey. Initially these buildings served as a place outside the formal rigor of the gardens. The King's procession through the gardens of Versailles was a formal event that proceeded on a fixed path in two parts on the two sides of the main alleé; one in the morning and the other in the afternoon. It was for the singular point of view by the King that the garden was composed, and the linear path was soon to fall out of fashion as the political and social climate in France changed in the early eighteenth century – the age of the libertine, the age of the folly.

Falling somewhere between fashion, theatre and garden design, the folly stands on its own as an ephemeral expression of the ideas of its makers. Its name intimates this: *folie* in French can be madness or wanton behavior (whose afflictions could include "madly in love"). These architectural pavilions were always built a distance from the main estates, always demanding a journey for those wishing to participate in the splendor of their spaces: "The folly became less an example of the bad, than a not-so-secret harbinger of the impossible desired."[12] Life in the early pavilions, or at the estate retreats that were associated with them, not only meant a withdrawal from the etiquette of court, but also typically allowed one to cook for oneself, a whole realm of sensual pleasure in itself. The Temple of Love at Gennevilliers is an early example of this architecture.

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[11] *Ibid*, p 82.

[12] Anthony Vidler, "History of the Folly" in *Follies – Architecture for the Late-Twentieth-Century Landscape* (New York, 1983).

The Marquis d'Argenson describes the duc de Richelieu at fifty in his diary:

> *...the most useful quality that he has for the ministry is what is called style: I doubt if even his great uncle, the famous Cardinal de Richelieu, had a more vehement and positive way of talking than he has...He has been very popular with women. The rivalries and jealousies of coquettes have brought him many triumphs; never any true passion, much debauchery, sensual satisfaction without pleasure; he deceived the members of a feeble sex and mistook the senses for the heart.*[13]

Argenson herein begins to set out the two views on an ethics of pleasure that dominated eighteenth century libertine world: One, that the noble love of the heart gives true pleasure, the other that dealt with vanity or superficial sensuality is ignoble and attributed to the libertine.

With the death of Louis XIV in 1714 and the ascent of the debauched Duc d'Orleans as regent, the aristocracy was thrown into a world of seemingly limitless freedom which ended with the French Revolution. The libertine novel was a forum for the discussions on love and freedom, as were the fringes of the garden. Generally regarded as frivolous and hedonistic excesses, these texts and constructions have only recently began to be looked at more carefully. When culture finds itself in a crisis, there are fissures through which society finds a way to express what is missing or what does not fit within the structure of the accepted, and these novels are indeed an expression of outraged morality, especially *Les Liaisons Dangereuses*.

With the Regency, a certain liberation of the body took place. Clothing loosened, furniture began to take into account the human body and physical desires and pleasures of all sorts were indulged. Boredom was the cancer of the eighteenth century. The means to stave off this boredom were best exemplified at the court of Louis XV and his mistress, Madame de Pompadour by their craving

[13] René-Louis de Voyer, marquis d'Argenson, *Journal et Memoires* (Paris, 1867).

for change: change of location, change of scenery, changing spectacles and theatre, feasts and sensual splendors. Love, too, provided a threshold for boredom. Love left those who resisted its pull to rest in boredom and put those who engaged in it to servitude: servitude to their lovers (for those who truly love as Argenson advocates) or servitude to an endless stream of celebrated pursuits which do not bring true love.[14] How was the libertine to achieve real freedom?

Catherine Cusset in several of her recent works[15] explores the possibility of an ethics of pleasure, which maps out a space for libertine culture beyond vanity. The intense self-awareness of the libertine and an awareness of presence are seen in the plethora of libertine literature. There is an awareness of pleasure as a momentary event, and yet an unmistakable sign of being, of existence.

The libertine tends to look obliquely at love. There is a faith in the pleasures of the body[16] and yet an awareness of the non-absolute nature of this pleasure. In his architectural and theatrical works Servandoni embraces this world and builds a thin truth in working within the living present while conducting some of the most sensational performances of the eighteenth century.

The Libertine Novel

The libertine novel presents a view of the libertine world of the Duc de Richelieu. *Les Liaisons Dangereuses* (1782)[17] by Choderlos de Laclos and *Point de Lendemain*[18] (1777) by Vivant Denon along with *La Petite Maison*[19] (1758) are particular works cited here.

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[14] Micheal Fehr, *The Libertine Reader* (New York, 1997).
[15] Especially *No Tomorrow, the Ethics of Pleasure in the French Enlightment* (Charlottesville, 1999) and introductary notes in *The Libertine Reader* to the translations of *The Wayward Head and Heart* and *No Tommorrow.*
[16] Le Dantec, p 84.
[17] Translated as *Dangerous Liaisons* by Michel Feher in *The Libertine Reader*, pp 936-1254
[18] Translated as *No Tomorrow* by Lydia Davis in *The Libertine Reader*, pp 732-746.
[19] Rodolphe El-Khoury, *The Little House* (New York, 1996) translation of Jean-François de Bastide, *La Petite Maison* (Paris, 1758).

Libertinage as expressed in these and other related writings defines a part of society – the upper class, the wealthy and above all, men. Although women are written of and included in the society of the mid-eighteenth century, their presence was primarily expressed in the salons.[20] Libertinage is not homogenous in cross-section. The period of the mid-eighteenth century identified three degrees of predilection for freedom: for the man who worked within the structure of the court to stockpile small freedoms without serious investment of the self (the "petits-maîtres" described by Micheal Feher)"; for the dangerous man or "man of principle" whose vengeance is played out on society; and for the radical libertine of de Sade who removes himself from the public to focus on what is his nature.[21] All three believe in the inconstancy of the nature of things, which include the heart of man, and to embrace it was freedom – although there were impediments.

Chains of Love

For the eighteenth century libertine, love was at odds with freedom. Authors of libertine literature struggled with the possibility of reconciling the two, a struggle perhaps best shown in *Dangerous Liaisons* where the Vicomte de Valmont attempts to sort out his feelings for the Présidente de Tourvel. The libertine undoubtedly knew the power of love. The space between desire and the consummation of that love was the most volatile substance known to them; it was the space of the imagination – the space, or delay which Servandoni would melt.

Ironic Love

In the works of libertine fiction, the characters clearly are exploring this delay between desire and consummation. If not controlled properly, the imagination would build fantasies which might be broken by reality. To wait too

[20] For a thorough investigation into the place of women and the role of the salon in the definition of space see Pamela Plumb-Dhindsa, *From Royal Bed to Boudoir: The Dissolution of the Space of Appearance Told Through the History of the French Salon.* McGill University Master of Architecture Thesis, 1998.

long in this gap could mean to fall prey to passionate love, which was equated with a sickness and complete loss of freedom (although still envied).[22] To collapse the delay would inevitably lead to a carnal act of little pleasure that would need to be repeated frequently to stave off boredom.

For the *dangerous man* and the *petit maitre*, libertine love was firmly rooted in the public sphere in the eighteenth century.[23] The acknowledgment of desire, although complicated by issues of narcissism and vengeance, was only revealed by its public presence. That public appearance (or performance) was important for Servandoni in his projects:

> *Freedom as inherent in action is perhaps best illustrated by Machiavelli's concept of virtù, the excellence with which man answers the opportunities the world opens up before him in the guise of fortuna. Its meaning is best rendered by "virtuosity", that is, an excellence we attribute to the performing arts (as distinguished from the creative arts of making), where the accomplishment lies in the performance itself and not in an end product which outlasts the activity that brought it into existence and becomes independent of it.* [24]

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[21] Feher, pp 10-47.
[22] *Ibidem.*
[23] The radical libertinism of de Sade is aside from this as it required a removal from the public realm of opinion and appearance.
[24] Hannah Arendt, *Between Past and Future* (New York, 1993), p 153.

THE FRACTURE OF THE TEMPRO-SPATIAL UNITY

Architecture is the site of events, at the symbolic intersection between the enduring object and the ephemeral – light, sound, gesture, posture, ritual – uniting space and time.[25]

Since antiquity, this unity had been attained through the orders in the work of architecture. Critical changes in the structure of society, science and the arts of the seventeenth century set in motion changes that caused a fracture in this unity which was not critically observed until the eighteenth century. The fracture had not healed.

With the centralization of the French court both politically under Louis XIV and physically at Versailles under Cardinal de Richelieu came the formalization and regimentation of all aspects of daily life of the elite stationed there. Etiquette was of the utmost importance, along with lineage. Favours, whether a title, a posting, estates or money, were awarded at the King's discretion. The arts were no exception to the regimentation of court life.

In mid-seventeenth century France, under royal patronage (which greatly influenced institutional uniformity) the formation of the academies saw the creation of a theory-based group of artists whose mandate it was to set out the rules of their disciplines.[26] Also by mid-century, increasingly accurate observations of antiquities in Rome, in the form of written texts and drawings, began to flourish. The precise recording of detail revealed that what had been understood as the rule according to Vitruvius did not relate to the built realities in a direct way.

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[25] Pérez-Gómez. *Polyphilo or the Dark Forest Revisited*, p xiv.

[26] Joseph Rykwert, *The First Moderns* (Cambridge, 1991), p 15 notes that admittance to the academies meant the architect or artist was removed from his task of site supervision and hence from the practical side of the art. Theory became the mandate without practice.

In 1674 Claude Perrault published a French translation of Vitruvius' *Ten Books of Architecture* with the aim of finding a place for architecture within the new scientific world of theory of Descartes and Galileo, where universal norms were born of reason and not simply of precedent.[27] Perrault's proposal, later elaborated in his *Ordonnance* of 1708, set out two types of beauty: the positive and the arbitrary. The positive is that which is obvious to all, which is readily understood and seen, as in the quality of workmanship, the integrity of materials, symmetry (bilateral symmetry), and magnificence or scale. The arbitrary dealt with taste, which Perrault held was the realm of the architect, being based on an understanding of the conventions of society which should be governed by rules. Perhaps based on his work as an anatomist, he rejected the theory of a concord of harmony for the eye and the ear. This separation of the senses was based on biological observation of the "instruments" themselves. Perrault then proposes a system of orders to most easily secure uniform taste (the most probable and the simplest figures) and argues that it follows in the footsteps of the first proportions of the orders that was likely arrived at by chance (i.e he disregards that the orders had their origins in the proportions of the human body). If man has a need for order, he will create it. This simple reading of the world by the senses that comes together through reason, as outlined by Perrault, initiated the loss of the metaphysical dimension of architecture. Its impact on architecture was not felt until the eighteenth century.

The eye was the primary organ of sensory reception in eighteenth century thinking. Newton's empirical science had shown that truth would be revealed through observation. Artists, especially painters and decorators, including Servandoni, were among the first to represent this unbridled nature: a nature that was the source of origins. The older a work was, the closer it was to nature. By mid-eighteenth century, the ruins at Paestum near Naples that had rested in

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[27] Alberto Pérez-Gómez in the introduction to the translation of Perrault's *Ordonnance for the Five Kinds of Columns after the Method of the Ancients* (Santa Monica, 1993), p 1, and Robin Middleton in his introduction to Le Camus de Mézières *The Genius of Architecture; or, the analogy of that at with our sensations* (Santa Monica, 1992), p 19.



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Panini, painting of the Roman ruins.

obscurity,[28] were re-discovered and made a necessary addition to the tour of Rome. The vision of nature revealed by these artists came to change the other plastic arts, and act as a guide to taste.[29] The Enlightenment looked at antiquity, and with careful reconstruction, revealed the world of the past in its natural form and in doing so told the story of the past with conviction and strong moral overtones, with certain "improvements" allowed. Man's work then became progress.

Painters painted a new nature, wild and rugged, and their compositions inspired powerful sentiments (fig.3). Garden design in the later half of the eighteenth century undertook to explore the same possibilities as these paintings, not to mimic them formally, but to produce the same feelings or expression in the emotions of the viewers.[30] Among the foremost in this investigation was the Italian painter, Giovanni Paolo Panini. In the work of Panini, Rykwert points out discrepancies between a building by Fuga, which was severely plain, and Panini's painting of it. Panini changes the building to suit his taste, primarily concerning himself with the building as the *backdrop* to the scene.[31] Images or tableaux become parallel to built works. Gardens are built to evoke the tableau; nature needs improvements to be seen clearly and the painters are the ones to show the way.

The representation of architecture and nature in the works of Hubert Robert, Poussin, Watteau and Fragonard begin a new tradition. In Watteau's representation of Monmorency, the architecture is painted as a backdrop to the garden whereas the same building drawn by Silvestre in 1670 prioritizes the architecture by using a frontal perspective.[32]

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[28] Rykwert, p 270.
[29] Rykwert, p 465.
[30] Le Dantec, p 127.
[31] Rykwert, p 342.
[32] Elenor DeLorme, *Garden Pavillions and the 18th Century French Court* (Suffolk. 1996), p 84.

Eighteenth century man is the first to understand himself in the position of the man described by Kafka, in the space between past and future:

> *He has two antagonists: the first presses him from behind, from the origin. The second blocks the road ahead. He gives battle to both. To be sure, the first supports him in his fight with the second, for he wants to push him forward, and in the same way the second supports him in his fight with the first, since he drives him back. But it is only theoretically so. For it is not only the two antagonists who are there, but he himself as well, and who really knows his intentions? His dream, though, is that some time in an unguarded moment – and this would require a night darker than any night than has ever been yet – he will jump out of the fighting line and be promoted, on account of his experience in fighting, to the position of umpire over his antagonists in their fight with each other.*[33]

Although the scenario may not have been so clear to him, particularly the weight of his antagonist ahead of him, he is aware that tradition is not the sole source of all things, that his actions have an impact, and that the world is not a closed system. Architects began to examine this new awareness.

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[33] Arendt, p 7, quoting Franz Kafka from *Notes from the year 1920* under the title "*HE*", translated from the German by Willa and Edwin Muir and published in *The Great Wall of China*, (New York, 1946).

JACQUES-FRANÇOIS BLONDEL: Cours d'architecture

The most prolific architectural educator of the eighteenth century, Jacques-François Blondel (1705-1774) was born into a family of architects and spent his life documenting and discussing the state of architecture. As a teacher at his own school, the École des Arts, and at the Académie Royale d'Architecture he offered a traditional education, advocating knowledge of all spheres of the arts and science. He had a keen awareness of the incertitude of his time, which he saw as a result of a general restlessness.

Architecture Laid Bare

Blondel's major works are his voluminous *Cours d'Architecture* (1771-1779), *L'Architecture Française* (1752), *De la distribution des maisons de plaissance et de la décoration des édifices en general* (1737) and his *Homme du monde éclairé par les arts* (1774). In these texts Blondel devotes much discussion to questioning whether aesthetic principles or practical needs should govern architecture, and sets forth *distribution* as the middle ground that would meet these requirements. He saw reason and antiquity as the foundation of architecture. As such, he sat on the edge of committing himself to a radical loss of faith in the power of the orders (even though he had measured innumerable buildings and knew there was an inconsistancy). His solution was to find a "workable formula" for architecture based on observation and mediation of the works of architecture which he saw as good.[34]

By basing his ratings of architecture on personal taste, Blondel engaged in a form of architectural criticism, which he partakes in all his works. The meaning of architecture rests in a subjective reading of the work as opposed to an embodied truth. And while Blondel's theory rejects the clear objectivity of Perrault's arbitrary beauty, he does base his readings on *distribution* or

[34] Emil Kaufmann, Architecture in the Age of Reason (Toronto, 1955), p 132.

convenance which come part way toward these theories. Convenance, in the eighteenth century, is an agreement between purpose, situation and form,[35] revealing the use and status of a particular room or building.

The discussions on distribution evolve into the exploration of character for Blondel which had been first articulated in regards to the expression of the parts of the body in painting. Le Brun had theorized in the late seventeenth century that expression or character could be made visible through his work in physiognomy, which had been translated into architecture by Germain Boffrand in 1745 in his *Livre d'Architecture.* Blondel's "character" was still based in proportion that had roots in the transcendental, and yet it was a poetry that was put to work to create "terrifying or seductive" buildings whose essence could be clearly recognized as "the temple of Vengeance or that of Love."[36] Blondel's *Maisons de Plaissance* provides an insight to this theory, as does *La Petite Maison.*

The emergence of the petite maison, or secondary residence, began when the restrictions of Versailles loosened under the Regency of the Duc d'Orléans. Louis XIV had begun building hunting lodges or buildings such as the Trianon to escape the rigorous formality of the court, and to meet with his mistresses before their introduction at court. The petite maison then was first built as an escape from the structure of the everyday. The courtiers themselves began to build these structures, often owning them secretly.[37] Unlike their Italian counterparts of the Renaissance who retired for the summer to the mountains with their families for cooler weather and country life, the French elite often created a second life within the same city as their primary residence; like an actor who retires from the role he must play on stage, to his private life beyond the directed view of the audience. These buildings, though smaller in scale, were built of quality materials and

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[35] Rodolphe el-Khoury, p 46 quoting Anthony Vidler, *Claude-Nicolas Ledoux: Architecture and Social Reform at the End of the Ancien Régime* (Cambridge, 1990), p 50.
[36] Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge, 1985), p 68 quoting Jacques-François Blondel, *Cours d'Architecture ou Traité de la Decoration, Distribution et Construction des Bâtiments* (Paris, 1771), 9 vol., vol. 3, p 4.
[37] Michel Saudan and Sylvia Saudan-Skira, *From Folly to Follies* (Geneva, 1997), p 105.

eventually had a guidebook for their construction and design laid out in Jacques-François Blondel's *De la distribution des maisons de plaisance et de la decoration des edifices en general*. This work outlines the various situations for the *maisons de plaisance*, or pleasure houses, taking into regard the orientation of the building on the site, the context and the status of the building and presents the proper distribution for each option. Gardens, follies, ornament, rooms for various purposes and other details are all presented with reference to the appropriate character for each element and local or noted examples are given for the reader.[38] The novel, *La Petite Maison* provides a literary narrative for these elements to be tested.

La Petite Maison

The novel, *La Petite Maison*, is an architectural seduction. Based on the ideas of Blondel, it tells the story of Trémicour and his seduction of the beautiful Mélite by means of his petite maison. Trémicour had made several unsuccessful attempts at seducing Mélite and challenges her to come to his petite maison, a place "artfully contrived for love." As she passes through the gates of the house, she embarks on the journey of initiation and seduction. From gardens of flowers and fruits, to a menagerie, a kennel and carriage house, each element of the maison is described by its *character*, which produces the appropriate sentiment through its proper distribution in Mélite. They enter the house described first by its exterior character and then by its procession of rooms, explored in sequence, each one heightening the ecstasy of Mélite. Her curiosity carries her on, and each room enchants her more. She has never seen anything so beautiful. In the end, she loses the wager.[39]

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[38] Jacques-François Blondel, *De la distribution des maisons de plaisance et de la decoration des edifices en general*, 2 vols. (Paris, 1737).
[39] El-Khoury, p 58.

CHEVALIER SERVANDONI: the spectacle of love

> *Unlike the judgement of the intellect which precedes action, and unlike the command of the will which initiates it, the inspiring principle becomes fully manifest only in the performing act itself; yet while the merits of judgement lose their validity, and the strength of the commanding will exhausts itself, in the course of the act which they execute in cooperation, the principle which inspired it loses nothing in strength or validity through execution.*[40]

Arendt's philosophy applies neatly to Giovanni Niccolo Servandoni, whose life was devoted to the performing act. It applies in this context to the intentions of the architect in the practice of architecture. Giovanni Servandoni left no written theory and was known to be adverse to speculation[41] unlike his contemporary, Jacques-François Blondel. When the writers for the entry on Architecture for Diderot and d'Alembert's *Great Encyclopedia* were chosen in Paris, Servandoni would have been a strong choice. Blondel had lauded his numerous and inventive successes including the celebrated façade at St. Sulpice, but he is overlooked in favour of Blondel.[42] The contribution to the *Encyclopedia* would have bolstered Servandoni's reputation (a benefit that he would not have overlooked) and allowed him to present his intentions in architecture, yet he remains quiet.

Servandoni is defined by his actions, most often documented by others in the form of narrative, memoirs, etchings of the events and reports in the *Mercure de France*. His works include fireworks, large-scale spectacles, dioramas, painting, decoration and architecture. Servandoni's projects do not separate these arts; instead he blends the world of theatre and painting with spectacle and architecture to make a new type of all-embracing experience.

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[40] Arendt, p 152.
[41] Rykwert, p 417.
[42] ibidem.

Servandoni's projects evolve over time as he moves from painter, to stage designer at the opera for the Académie Royale de Musique, to his public spectacles in the Salle des Machines in the Tuileries, and then into more private projects for individuals. All the while he blends the arts, giving a new direction to architecture in France and new substance to the dialogue on the expression of the senses, in particular to the argument of Roger de Piles and his theory of the unity of impact (*unité d'object*). Piles contended that painting could have an instant visual impact on the viewer, aside from the narrative content of the work, which is there only to sustain the feeling after the initial and instant submission to pleasure.[43]

A closer inspection of Servandoni's work reveals his manipulation of the delay between desire and the fulfillment of pleasure. In 1750, upon his return from London, he designed the Temple of Love, the ultimate symbol of that delay, for Richelieu before he left France to work on a series of spectacles across Europe. He returned to design a garden at the château of Hingene in Belgium which he worked on from 1761 to 1765 before he died in 1766.[44]

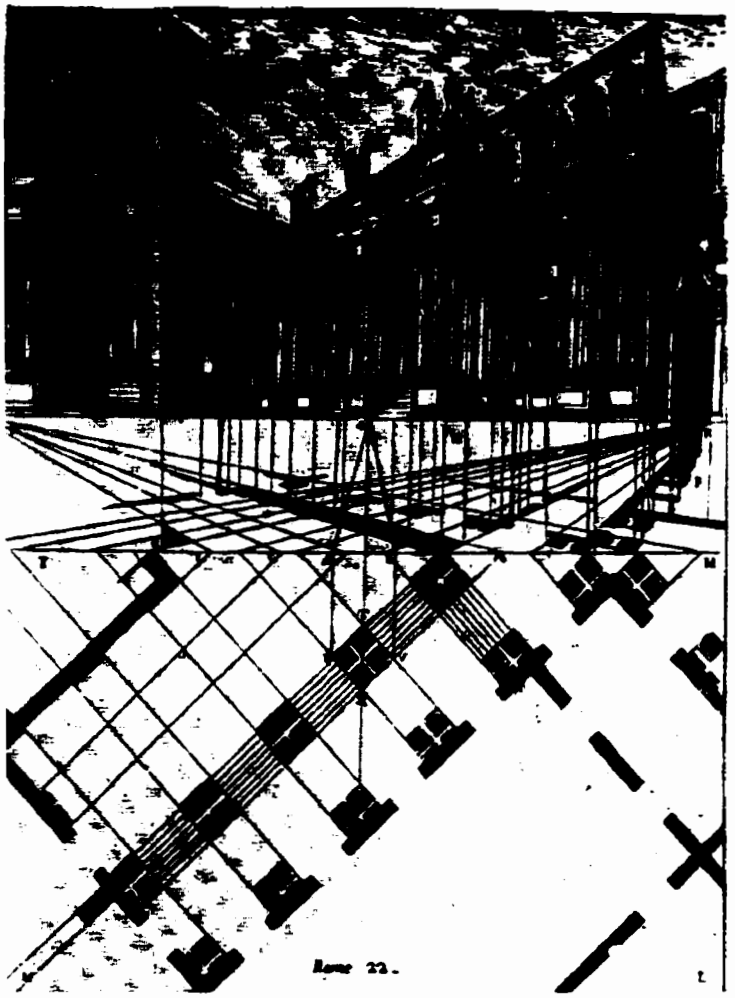
Beginnings – Life and Drawing

> *Servandoni alone managed to sustain the Greek style in all his works, while in his time Paris gave birth to little more than monsters.* [45]

An Italian courier between the cities of Florence and Lyon fell in love with a beautiful Lyonnaise. In 1695, Giovanni Niccolo Servandoni was born to this couple in Florence (or perhaps Lyon) or perhaps on the road between these two cities famous for their arts, gastronomy and fashion. Throughout his life, Servandoni would continue to travel and to relish the temporal life in transit, making ephemeral works of wonder.

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[43] Robin Middleton, introduction to *The Genius of Architecture*, p 31.
[44] Clare Hornsby, *Servandoni's Garden Designs for Hingene in Garden History, the Journal of the Garden History Society*, Vol.16, no.2 (Autumn, 1988), p 134-143.
[45] Rykwert, p 113. Jacques-François Blondel quoted in praise of Servandoni's façade at St.Sulpice.



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Theatre stage design after *scena per angolo* (plan and perspective) from Ferdinando Galli Bibiena, Architettura Civile (1711).

His formal training was first in painting while in Florence with Giovanni Paolo Panini[46] whose paintings of Roman ruins inspired him throughout his career. Panini also designed a *macchina* (the temporary building structures from which fireworks are set off) and had taught perspective at the French Academy. Servandoni's architectural training began when he went to Rome as a very young man to study under the architect Guiseppe Rossi. In Paris in 1732, Servandoni won the competition for the design of the façade at St. Sulpice, which is most noted for its contribution to Neoclassicism following Perrault's ideas from the *Ordonnance* of a "conventionalized, a schematized and an unspecific antiquity."[47] After making alterations to the project in 1742 while it was under construction, Servandoni abandoned the project.

The Embrace of Theatre and Perspective

He first works are at the Académie Royale de Musique where he began to work as a theatre artist upon arriving in Paris in 1724, soon graduating to *premier peintre et décorateur* (1728-1737). The scenes for the theatre that Servandoni produced were often inspired by paintings or etchings appropriate to the subject at hand. He looked to the style of Claude Lorrain for his Elysian Fields, to contemporary rococo works for wings to a palace, and to a seventeenth century engraving for a backdrop garden.[48]

His scenes, which ranged broadly in their theme, were in the tradition of the Bibenia family of theatre artists whose inventive works produced large-scale effects for ephemeral events. However, the Bibenia perspective or *scena per angolo* (fig.4) no longer had a privileged point of view. One-point perspective

[46] Although most early accounts of Servandoni conclude that he was born in Italy and studied under Panini, Sir Reginald Blomfield (1920) points out that Panini (b.1695) would not have yet established his reputation to have Servandoni as an understudy. Nonetheless, Servandoni's work resonates with Panini's paintings of the Roman ruins.
[47] Rykwert, p 115.
[48] Donald Oenslager, *Stage Design, four centuries of scenic invention* (London, 1975), p 84.

had provided a privileged seat in the theatre, reserved for the King, with the focus of the event and its effects seen clearly only from that seat. With two-point perspective, the proscenium of the stage seemed to disappear and each spectator found themselves equally drowned in the new reality called perspective.[49] Servandoni the architect used this perspective to achieve an all-embracing experience. The architect could then enhance this embrace of perspective by manipulating the scale, the distance and the acceleration of the perspective, and give a greater illusion of depth. The real architecture of the theatre, its balconies and arches could be continued in the sets to bind the theatrical experience and the spectators in the full perspectival illusion.[50] Servandoni himself is noted as having successfully achieved "*une Représentation exacte*" in the opera *Scanderberg* of 1735 where the stage became the interior of a church, complete with painted figures kneeling and an immense scale producing a shocking illusion of depth and the reality of the light within the church.[51]

In 1764, Jacques-François Blondel would write, "Without the decorations and extensive lighting of the famous Servandoni, our theatres would not be able to achieve this degree of excellence. Servandoni, who is no less an excellent architect than he is painter, presents to his imitators a path which, for them, is not attainable because they lack the architectural theory, the useful travels, the knowledge of history and the lack of having read the best books available on their profession!"[52] While the comment is directed at Boucher who took over the designs of the theatre after Servandoni departed, it nonetheless gives a view to Servandoni's genius in the eyes of Blondel. He promotes the experience of the architect and at the same time notes that it is the lighting of the theatre that has raised Servandoni above his contemporaries.

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[49] Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, 1997), p 75.
[50] *Ibidem.*
[51] Gösta Mauritz Bergman, *Lighting in the Theatre* (Stockholm,1997), pp 131-132.
[52] Jacques-Franois Blondel, *Discours* (1764), p 89, in L. Hautecoeur, *L'Architecture Classique en France*, III. pp 266-270.

Lighting was critical for Servandoni. He infused his stage works with mysterious light such as had not been seen before in Paris, allowing him to dissolve the distinction between the real and the constructed elements of the theatre. His early works used a hidden centrally placed source of light from which produces intense reflections from a highly reflective décor of gold, crystal and precious stones. These elements had been used in theatre previously but Servandoni took them to a new extreme to create a new world of light that filled the stage and the auditorium.[53]

His skill in painting allowed him to paint convincing illusions especially using chiaroscuro. Whether it was the trees of a forest or the architecture of the city, his skill was such that the painted and real figures of the theatre and the built and painted elements of the stage could not be distinguished. He painted throughout his career, exhibiting his paintings at Salons in Paris, most of which depicted ruins and nature unbridled with an immense scale like his teacher Panini.[54] His drawings, too, evoked a Piranesian grandeur that seized the eye.[55]

Transporting Paris – the Eye Arrested

After exhausting his ideas for the stage of the opera by 1737 (as well as its budget) Servandoni took his ideas outside the theatre. In the *Salle des Machines* in the Tuileries, Servandoni produced an event of his own design, a unified theatrical experience of *son et lumiére* presenting Saint Peter's Cathedral in Rome utilizing a diorama.[56] Within a diorama, he used sound, light and motion to effectively bring St. Peter's to the people of Paris.

The diorama extends the embrace of the two-point perspective he had worked with in the theatre, seizing the observer with the image of the view. It is

[53] Bergman, p 130.
[54] *Ibid.* p 129.
[55] Oenslager, p 85.
[56] *Ibidem.*

the diorama effect itself which is the focus of the audience, not the subject matter – a *spectacle d'optique*. Like the theory of Piles, the visual impact is primary, and the allegory or subject matter simple extends the interval of interest.

Servandoni continued to experiment with different *jeux d'optique* throughout his career. His works as an architect continuing to blur the distinction between the artificial space of the theatre and the space of the world. The shift in focus, from the theatre itself to the effects, from narrative to technique, would be critical for the years ahead, and lead to an instrumentalism that is chronic in our present world.

Trompe l'oeil at Condé-en-Brie

Servandoni found much work in decorating the *hôtels particuliers* of grand private homes of the élite including a variety of works at the château of Condé-en-Brie. The medieval château, which was purchased by Jean-François Leriget de la Faye in 1719, had previously been in use as a garrison by Louis XIV. A sincere patron of the arts and lover of literature (he received Voltaire and Crébillon often in Paris), decoration and gastronomy, he renovated the estate employing Servandoni, Watteau and Oudry among others.[57]

Servandoni's work included transforming the old château into a modern country house in the taste of the eighteenth century. He removed the southern wing of the château, which closed the fourth side of the château, replaced the old main staircase with a new one of vast proportions. He painted windows where he felt they were needed to give the sense of symmetry and inside he painted four niches filled with sculptures to represent the seasons, along with pilasters and coffered ceilings, all in *trompe l'oeil*. His other additions are a new dining area and a music hall.[58]

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[57] Marc Gaillard, *Servandoni, Oudry, Watteau et ses élèves au château de Condé-en'Brie* in *L'Oeil*, No.417 (Geneva, 1990), p 46.
[58] Gaillard, p 47,49.

The operations which Servandoni imposed on this building help us to better see his intentions. The primary physical changes were done by removing parts of the château, which permitted southern light into the court and allowed the building to be penetrated by the eye of an observer. When he makes additions they are either built in a very large scale or they are painted *trompe l'oeil* onto the skin of the existing building. With the increased light, the paintings could be better observed and their effect more stunning. Gaillard describes the space as having the feeling of a fête.[59]

The feeling of a fête, of a theatrical spectacle brought to the private sphere of the house. His preparations at the château are for the eye, certainly, and he also extends this performance to include a hall for music with excellent acoustic properties and a new dining hall, completing the sensational experience.[60] He leaves all the other work to fellow designers.

The "Macchine" of the City

Fireworks had long been part of celebrations marking the arrival, births, deaths and marriages of royalty in Rome and the buildings from which they were launched were known as *macchine.* These transient and brilliant monuments were often quite costly, and early in the eighteenth century accounted for a large part of the architectural finances of the city. While these structures normally were only erected for the short period of the festivities, they were nevertheless often recorded through engravings.[61]

The *macchine* themselves were made of cloth, lath and plaster and were often on a larger scale than the surrounding buildings, giving the architects who designed them a chance to build more "extravagant or advanced schemes than

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[59] *Ibid,* p 49.
[60] *Ibidem*
[61] Rykwert. pp 357-358.

they could in more permanent buildings."[62] They could be three-dimensional constructions but also two-dimensional, like theatrical backdrops or the views painted on walls in the gardens of the English at the ends of walkways to extend the path for the eye.

Servandoni, a master of these large-scale ceremonial structures and their choreography, was employed across Europe for his celebrated talent (Paris 1739, London 1749, and Vienna 1760). His work in designing the scenes for operas also took him to in Lisbon, 1742, Dresden, 1754, and Vienna, 1760.

Servandoni spent considerable time in England, his most famous stay being in 1748-1750 to design the fireworks display to celebrate the Peace of Aix-la-Chapelle which were celebrated on 17 April 1749 in St. James' Park. A vivid image of Servandoni's character and his passionate involvement in his work are portrayed in accounts of the evening. The night was rainy causing some of the fireworks to misfire; one side of the *macchine* caught fire at which point Servandoni threatened one of the workmen with his sword.[63] The event went off well nonetheless and Servandoni was soon employed by Bubb Doddington in London to design the sculpture gallery in Roger Morris' Brandenburg house where he installed three-colored Florentine marble floors and decorated ceilings. Servandoni spent many dinners with Doddington and absorbed English ideas and thinking there.[64]

The *macchine* and fireworks celebrated an event, a contemporary happening. Unlike the architectural projects for buildings, which took years to complete, they appeared quickly and could be enjoyed instantly.[65] In

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[62] *Ibid*, p 358.
[63] *Ibid*, p 260.
[64] *Ibidem*.
[65] *Ibid*, p 362.



5
Servandoni's Temple of Hymen macchina exploding at the spectacle on the Seine in Description des festes donnée par la ville de Paris, à l'occasion du mariage de Madame Louise-Elisabeth de France, & de Dom Philippe, Infant & Grand Amiral d'Espagne, les vingt-neviéme & trentiéme août mil sept cent trente-neuf by Jacques-François Blondel (Paris, 1740), plate 9.

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Württenburg, employed to design the festivities for the opera there, he produced sixteen different spectacles over the sixteen-day festival.[66]

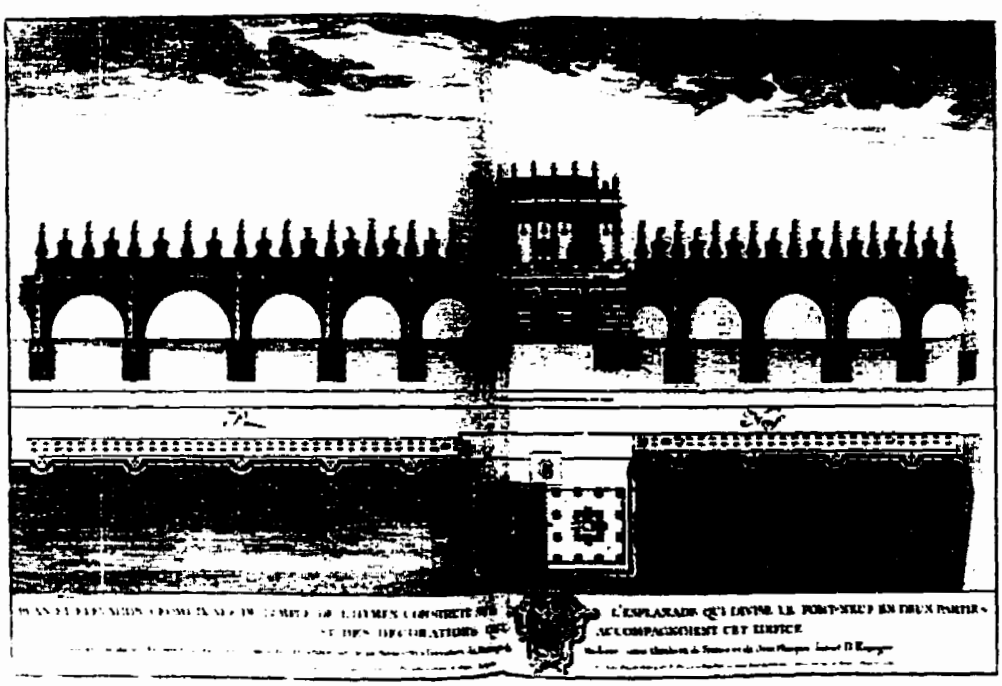
In 1739, Servandoni was in charge of organizing the fêtes for the French court, and likely befriended the duc de Richelieu at this time. Servandoni prepared the celebration for the wedding of Louis XV's daughter to the Infante of Spain Dom Felipe. In Jacques-François Blondel's illustrated text of 1740, *Description des Festes données par la ville de Paris a l'occasion du Mariage de Madame Loiuse-Elisabeth de France, & de Dom Phillipe, Infant & Grand Admiral d'Espagne, les vingt-neuviéme & trentiéme Août mil sept cent trente-neuf,*[67] we have the account of this spectacle, its temporary buildings and fireworks orchestrated by Servandoni.

The ceremony was performed on the Seine between the Pont Neuf and the Pont Royale with spectators seated on either side of the river. On the morning of 29 August 1740 the sun rose up behind an exquisite Temple of Hymen, its rays reflecting off the painted colonnade of giant Doric columns crowned by pagan divinities. The new wing of the Louvre, the buildings bordering the Seine and newly constructed buildings and *macchine* all stood together as the set for the event. The temporary buildings were mixed with permanent architecture of the city *without* differentiation for they all served to *frame the event*; all the various forms and allegorical figures were appropriate to the occasion.[68]

The event took place along the river between the two bridges with seating lined along both its banks facing each other. The proximity of the seating to the river and the grand scale of the spectacle effectively placed the audience within the performance, becoming a part of it. A new artificial island had been constructed in the middle of the Seine supporting a music pavilion pierced by a

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[66] Oenslager, p 85.
[67] Jacques-Franois Blondel, *Description des Festes données par la ville de Paris a l'occasion du Mariage de Madame Loiuse-Elisabeth de France, & de Dom Phillipe, Infant & Grand Admiral d'Espagne, les vingt-neuviéme & trentiéme Août mil sept cent trente-neuf* (Paris, 1740).
[68] *Ibidem.*



6
The Temple of Hymen (plan and elevation) by Giovanni Servandoni
in Description des festes donnée par la ville de Paris, à l'occasion du mariage de Madame Louise-Elisabeth de France, & de Dom Philippe, Infant & Grand Amiral d'Espagne, les vingt-neviéme & trentiéme août mil sept cent trente-neuf by Jacques-François Blondel (Paris, 1740), plate 2.

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giant column from which the orchestra played; urns, obelisks, and terraces embellished the existing site. The natural and the artificial were one, all serving the theatrical event. The Temple of Hymen (fig.6), a *macchine* from which the crescendo of fireworks erupted at the climax of the ceremony, presided over the event from the middle of the river at the Pont Neuf.[69]

This work fuses the theatre to the city and complements Servandoni's work in the theatre where he brought the stage, the image of the city, to surround the observer. For Servandoni, theatre was the reality. There was no longer any separation of the symbolic space of perspective and the real space of the world.

[69] *Ibidem.*

THE DUC DE RICHELIEU: the site of love

Contemporary architects have often employed the "folly" as a means of architectural investigation. It offers a suspension from the full pragmatic concerns of the present and provides an "ordered escape,"[70] a direction for thought.

Son Excellence

In his animated life, which spanned three regencies and two centuries, Louis-François Armand de Vignerot du Plessis, duc de Richelieu, was a constant source of intrigue and rumor. Born on 3 March 1696[71] to Anne-Marguerite d'Acigne and at their family mansion in the Place Royale, he would live until the age of ninety-two, finally collapsing of heart failure on the 8 August 1788, the same day as the meeting of the *Estates-Général* whose brief work would signal the end of his libertine world.[72]

Richelieu remained at court from his presentation to Louis XIV in 1711 through the regency of the Duc d'Orleans, Louis XV and Louis XVI. Despite his three trips to the Bastille before he was twenty-one, he was appointed as Louis XV's First Gentleman of the Bedchamber, the highest title for those not of the royal blood, which called him to service every four years. The post put him in charge of the *Menus Plaisirs*, which included the arrangements of all the royal fêtes, including arranging temporary structures, decorations for ballets, operas,

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[70] B.J Archer. *Follies - Architecture for the Late-Twentieth-Century Landscape.* (New York, 1983).

[71] His birth was witnessed by two guests who were summoned in the night, a certain Francesco Mario Pompeo Colonna and his friend the Abbé Nicolas Laurent. Their mysterious appearance at his birth, subsequent publishing of an alchemical treatise under his sponsorship and their apparent murder and burning upon their beds some year later were just a few of the rumours of involvement in the black arts that followed Richelieu.

[72] Hubert Cole, *First Gentleman of the Bedchamber* (London, 1965).

balls and the orchestration of many of the royal rituals including the royal *levers* and *couchers*.[73]

Perhaps because of his continuing battle to defend his status at court (his lineage from Cardinal Richelieu was tenuous), Richelieu spent much time in the royal archives investigating privileges of rank, ceremony and etiquette. Because of his longevity and his investigations he became the arbiter of court etiquette and simultaneously, or perhaps as a result, a master at operating outside the rules.[74]

As a patron of the arts he employed the service of Servandoni at Gennevilliers, Jean-Michel Chevotet for his Hotel d'Antin, Gaetano Brunetti for interiors and Boucher for paintings. He also collected various antique vases from Italy, was known to have owned Michelangelo's Slaves, had a renowned collection of furniture, tableware and exotic Chinese wallpaper, and he inherited a large collection of the works of Nicolas Poussin as well as his father's Ruebens collection. His chef Clouet was famous across Paris.[75]

Richelieu married three times in his life, and his last wedding was in 1780 at age eighty-four after being restored to life from apparent death the year previous.[76] It was not his family life that made him famous. His adventures with numerous mistresses were some of the most spectacular of the era. Hubert Cole notes that "the impact that (Richelieu's) amorous exploits made on his contemporaries, and on many of his countrymen in succeeding generations, was partly due to the elements of drama that he imparted to them: sometimes comic, sometimes farcical, and sometimes...melodramatic...always playing the conscience of his prey against their desires."[77]

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[73] *Ibid.*
[74] *Ibid.*
[75] DeLorme, p 138.
[76] Cole.

Richelieu indeed enjoyed the act of seduction. For him, it was pure theatre powered by the irresistible promise of love and pleasure. This spectacle of seduction consumed most of his life, although his other interests in etiquette, war and hunting also contribute to his world that Servandoni celebrates at Gennevilliers. As Cole says, "He was a man of great physical resources, yet always in sad need of new refinements and mental stimulus to keep his interest alive in a woman once he had seduced her."[78] The act was never enough, always in need of renewal, and yet he accepts and recognizes that fulfillment, if it were to be found, would be death.

It is curious to note in Richelieu's letters and memoirs that he writes of his first love, an actress, "duchess de _____." Just before his death, he removed her name with a penknife from all of their letters which he kept locked in a cabinet. It is curious that the name of this mysterious duchess was not known publicly, as were the rest of the notorious events in his life.[79]

His adventures begin from his first days when, as a newborn baby, he was found apparently dead in his cradle. A passing maid picked up the child out of pity and held him to her breast where he was instantly revived. His most famous intrigue surrounded his affair with Madame de Popelinière, which was discovered by her jealous husband. Richelieu had rented the adjacent apartment to hers and had secretly constructed a revolving panel in the fireplace between their bedrooms to allow them to meet. His sense of invention was inexhaustible, inventing the carriage with onboard bed and pantry for long trips, and numerous costumes to conceal his amorous exploits.[80] His inventiveness and theatricality likely secured him management of the *Menus Plaisirs* for the King.

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[77] Cole, p 23.
[78] Hubert Cole, p 24.
[79] *Ibid.*
[80] *Ibid.*

He treated his body with the same sense of invention and luxe. He was fanatical about bathing (a rarity at the time) and often bathed in almond milk and alcohols, wore strong perfumes, and wore extravagant clothing embroidered with gold and gems at ceremonies. As he grew older, he taped his skin back under his wig to erase his wrinkles and wore extremely high shoes. There was nothing he would not do to better his image and "though he faced great competition, he was admirably equipped to achieve distinction."[81]

The Estate at Gennevilliers

> *The maréchal duc de Richelieu has built a hunting lodge at Gennevilliers: he has built a rotonda called Temple of Love; it is situated on a glacière, in such a way that it is called love on ice.*[82]

The town of Gennevilliers sits in the loop of the Seine just to the north of Paris, across the river from St.Denis. The area of this peninsula was designated largely as hunting grounds for the King[83] and residence of the Swiss Guard. After his triumphal return to court in January 1749 following a successful military campaign at Genoa the Duc de Richelieu purchased the estate of Gennevilliers. The area was still rebuilding from the famous flood of December 1740 which covered the entire plain under meters of water. Richelieu's recent posting as Lieutenant of the Royal Hunt had perhaps piqued his interest in this area and its bounty of deer.

In 1749, Richelieu was *en exercise* as First Gentleman of the Bedchamber to Louis XV. The King, bored with the intrigues of the court, spent only 50 days at Versailles this year. A series of events occurred which then changed Richelieu's status at court. On 23 April 1749 Richelieu accompanied Louis on a visit to La Celle, and two days later one of Richelieu's longtime opponents at

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[81] Hubert Cole, p 30.
[82] René-Louis de Voyer, marquis d'Argenson, *Journal et Memoires* (Paris, 1867) vol. VII, p 283, The memoir dated 24 August 1752.
[83] In Gennevilliers it is noted that Louis XV hunted down 2,651 deer in its forests.

court, one Maurepas, was dismissed. Perhaps as a celebration of this event or perhaps to publicly confirm that he was still in good standing with the King, Richelieu invited the King and Madame de Pompadour to dine with him at his *petite maison* on rue Clichy in Paris, the street of much new building *à la mode* in that time. Richelieu, with a natural sense of ceremony and pleasures, surely impressed his exalted company at this dinner, for just two weeks later they made the forty-five minute trip north to Gennevilliers to again be his guests for dinner.[84]

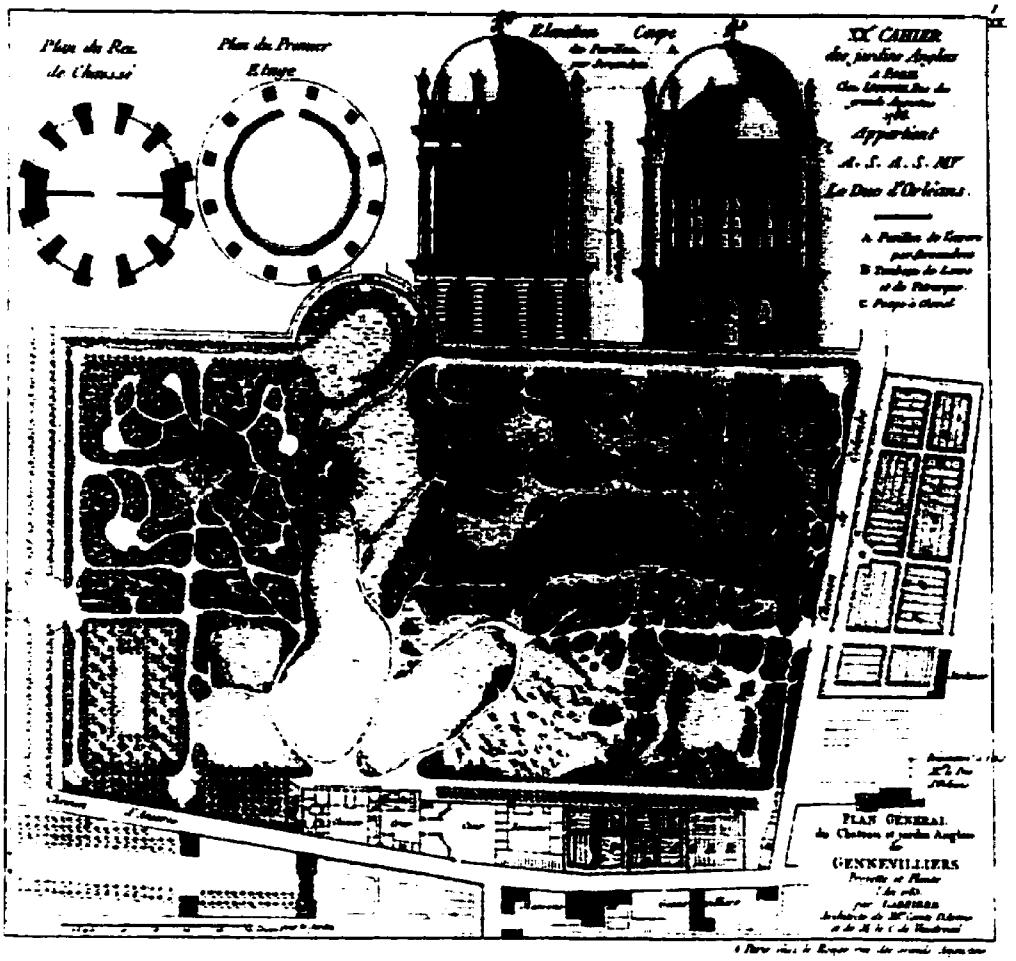
The pavilion at Gennevilliers and its gardens present several narratives on the idea of the threshold. Love. Throughout the cataclysmic change that society was undergoing, and though love was seemingly lost in the debauchery and court intrigue, the debate on love continued. Its presence, perhaps as an enigma or as a vestige of hope, emerged in the Temple of Love at Gennevilliers and spawned a proliferation of these monuments in France in the gardens of the French elite.

The Temple itself is a folly, or garden building, which presents an interesting mode of action in a world whose view on architecture had until then been absolute. The garden pavilion or folly was sister to festival structures and *macchine*; both were erected to "make visible the spirit of the event," whether it is the arrival, presence, marriage or birth of a person or persons of distinction.[85] The building was essential in achieving the full impact of the event and Servandoni was a master in this domain.

Gardens have always provided a retreat and an alternative outside the restrictions of the house. Follies provided a space outside of the restrictions of society, an exploration out of bounds, in forbidden territory. The liberties possible in these structures were not only what was spoken of, but also what was acted out. Later in the eighteenth century, what had been implied in the earlier models was revealed literally in, for example, the plans of Ledoux (the phallus

[84] Hubert Cole.
[85] Elenor DeLorme, p 12.

plan brothels) and Lequeu's monuments to Priapus. This trend increased over the century and later, catalogues and encyclopedias were produced to effectively summarize this experiment in varying degrees of freedom from Nicolas Le Camus de Mézières' *Genius of Architecture - or the analogy of that art with our sensations* to Marquis de Sade's *120 Days of Sodom*. These works, produced later in the eighteenth century, epitomize an equation or a recipe for architecture, space and love.



7
General Plan of the Château and garden at Gennevilliers, showing the Temple of Love by Giovanni Servandoni
From LeRouge, Les jardins anglo-chinois (Paris, 1776?-1788?), Cahier 20, planche 1.

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THE TEMPLE OF LOVE AT GENNEVILLIERS

> *My fleeting affairs, the academic intrigues and the circus of the court would not have been enough to occupy my leisure in 1749 without my little house at Gennevilliers, which soon became, thanks to Servandoni and myself, a beautiful pleasure pavilion, a rendezvous for hunting, for love and for the theatre of gastronomic prowess and bacchanals where Louis XV did not decline to play his role (often without the marquise) and to show himself, with fork in hand, a distinguished actor.*[86]

Narrative 1: Unfolding the Senses

On the 17 August 1750, a few days after the Duc had presented his son Fronsac and daughter Septimanie at court, the King went hunting with Richelieu at Gennevilliers, shooting a variety of wild game on which they dined that night in Servandoni's Temple of Love along with Madame de Pompadour. Richelieu passionately recounts the detail of this evening in his memoirs on which the description below is based.[87]

Servandoni's folly is a place of chance meetings for amorous encounters. The avenue to the château had been enlarged to three alleys, each lined by trees, emphasizing the importance of arrival. The château was modest with exceptionally large and extravagant kitchen and dining areas, with a kitchen garden nearby. The gardens (fig.7) were proclaimed by Richelieu to be planted in the English style but the later maps of the area still show the formal layout of the gardens in the style of LeNotre. To enter the garden, the guests could have left the château through the doors which led from the main salon, or perhaps taken a more direct route by leaving the house by way of the theatre stage.[88]

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[86] Bernd H. Dams and Andrew Zega, *Pleasure Pavilions and Follies* (Paris, 1995), p 94, Richelieu as quoted in Comte d'Allonville, *Mémoires Secrets, de 1770 à 1830* (Paris, 1838-45), vol.1, p 178.
[87] Memoires as republished in Robert Quinot, Gennevilliers, evocation historique (Gennevilliers, 1967), p 122-136 with observations of the plans have been reconstructed to form Narrative 1.
[88] An intimate theatre famed for its debut of Beaumarchais' *La folle journée or the Marriage of Figaro* (1783) at a time when the Duc's son Fronsac owned Gennevilliers.



8
Moreau le Jeune, 'Le Souper Intime'
Dining in the garden pavilion.

"The glacière, built within the newly built sugarloaf mountain and the elegant colonnaded rotunda imitating the Temple of Sybil at Tivoli, houses in its bosom a wine cellar. In this cave, wines are perfumed in the coolness amidst all the exquisite flowers which would otherwise wither and fall limp in the heat of summer. Above this precious cavern, where the sparkling nectar of Ai and the ambrosia of Sillery[89] is intensified by the coolness, and where it is held in preparation of its joyful explosion of golden foam, there sits a dining room with twelve doors of Venetian glass, unique in quality and clarity."[90] The view looked out on all sides through the carefully planted trees and to the south was a large lake and to the north there lay a small oval pond.

Boucher had decorated the interior with his most voluptuous inspirations, the principle subject of which is Venus and Love; four doves pull their chariot, two driven by the mother of Cupid and the other pair by Mercury who acts as postillion. Flower garlands represented the reins and various allegorical figures representing the seasons completed the design. The furnishings were noted by Abbé LeBoeuf in 1752 as being very "gallant, likely of the exquisite taste that Richelieu was famous for, the decoration exquisite"[91] and floors of a rich mosaic tile design.

They dined amid baskets of rare flowers and cages filled with exotic birds, on Richelieu's Saxony porcelain. The mellow mixture of greenery and statues constantly refreshed their eyes, their brow caressed by the nocturnal breeze gently moving through the open windows of the cupola, a feature which Richelieu had insisted for this place of retreat from the sun and exertion. The most refined and sensual gustatory pleasures joined to the freest conversation (fig.8). Louis XV dined without reserve, like a true hunter, on the fruits of his hunt at this meal, no milks, no vegetables and no flesh other than his prey, still bloody and pulsating.

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[89] Ai and Sillery are locations in the Marne region known for their excellent Champagne.
[90] Robert Quinot, *Gennevilliers, evocation historique* (Gennevilliers, 1967), p 122-136.
[91] *Ibid.* p 122.



9
Attributed to Giovanni Servandoni, garden terraces leading to a circular rotonda (on the left) and an arched collonade in the clouds.

The menu consisted of soup of puree of pheasant eggs, small pâtés finely chopped and curdled, bunting dumplings poached in water, blood pudding of hare, venison cutlets with rum sauce, half roasted partridge finished in wine sauce and wild mushrooms, boar marinated in Madeira wine, pheasant garnished with truffles. The menu of deserts and wines was no less lengthy and elaborate (and to our tastes, excessive and delightful). "The King showed his sincere satisfaction, feasting just short of indigestion, but saved by the quality of the seasonings, an excessive appetite and perhaps of greediness."[92]

Richelieu, encouraged by the King's promise to return to Gennevilliers to see his new works, sets out to embellish the garden and orangerie. "I had received the title of Lieutenant of the Hunt of Gennevilliers, and from the top of my Italianate castle, I am master of the plain, the field of adventures."[93]

Servandoni had drawn what may have been the Temple of Love that rests in the private collection of Donald Oenslager. The drawing is similar to the Garden Terraces he drew in 1750 (fig.9) just before he was commissioned to design the Temple of Love at Gennevilliers. The endless stairs constantly shifting the eye upwards, culminating in an image of a colonnade and part of a circular temple. In Oenslager's drawing, steps climb to a terrace and a circular temple held within the clouds.[94]

Reflection I

With these first-hand descriptions and observations from the plans, a reading of Servandoni's intentions unfolds, especially when read against Jacques-François Blondel's chapter dedicated to garden pavilions or belvederes in his *De la distribution des maisons de plaisance et de la decoration des edifices en general:*

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[92] Quinot, p 126-131. Quote by Richelieu.
[93] *Ibidem.*
[94] Oenslager, p 85.

We have said that small woods serve to protect one from the heat by means of the shade provided by their natural foliage in the warm seasons; but belvederes constructed of masonry in these parks have the additional advantage of providing a beautiful resting point for the eye during all four seasons and a shelter from bad weather. The essential point is that they are well situated and that we can notice them from a distance, this contributes greatly to their importance in the decoration of gardens. They are built of cut stone or of marble as is fashionable in the area; and these little buildings are frequently placed on a rise in our gardens, in order to better enjoy the view.[95]

Servandoni raises the pavilion, not just on a platform or a slight incline in the natural landscape as Blondel suggests, but on top of an artificial mountain. One must not only make the journey, but also make an effort to climb up to the sanctuary. Entry to the Temple of Love is difficult. Richelieu describes it as another zone, a place of repose and sensual pleasures where anyone can enter but must change their attitude upon doing so, or better, first exit from the realm of etiquette and formalisms. In the story of the dinner, Richelieu remarks that the King "took up his fork and showed himself an excellent actor." The social space outside the safety of the known order was theatre.

The glass in the pavilion is noted for its unique clarity. Plate glass had been manufactured in France on a larger scale and was more available since the mid-seventeenth century but its Venetian counterpart still outranked it. The glass would not only allow for a clear view to the gardens, but in fact would allow for a view to the inside as well. Raised above the gardens, and with the windows reaching down low near the floor, the pavilion would then be a raised stage for the acts to be performed within. At night, the same clarity that allowed for views to the outside would reflect the action within. Richelieu had a boudoir constructed later in his château at Bordeaux, a large oval room with mirrors on all the walls (and floor and ceiling) where bacchanalian feasts and orgies took place. It bears

[95] Jacques-François Blondel, *De la distribution des maisons de plaisance et de la decoration des edifices en general.* Vol 2, p 12.

close resemblance to Madame de T_____'s secret *cabinet* in Vivant Denon's famous 1777 libertine story, *Point de lendemain.*

Narrative 2: The Unlikely Seduction

> *The pavilion is crowned by a dome surmounted by a gilded figure of Mercury (which moves in the winds)*[96] *and surrounded by a colonnade of twelve columns which are each topped with a statue of pagan divinity, all forming a covered gallery.*[97]

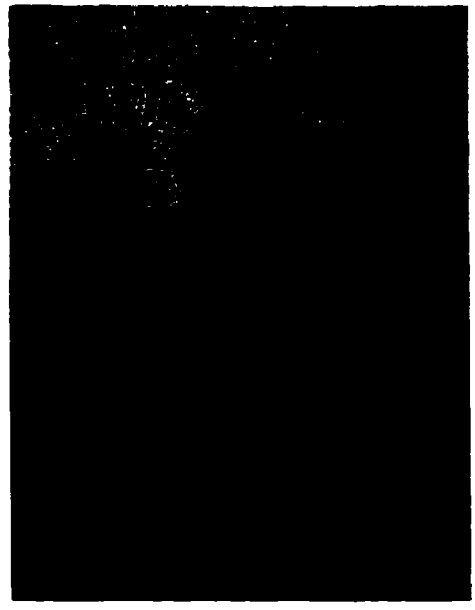
In 1774, Richelieu walks out into the garden with Mademoiselle Raucourt, a famous tragedienne from the Comédie-Italian, to show her his Temple of Love.

> *We trembled as we entered. This was love's sanctuary. It took possession of us: our knees buckled, our weakening arms intertwined, and, unable to hold each other up, we sank down onto a sofa...the moon was setting, and its last rays lifted the veil of a modesty that was, I think, becoming rather tiresome. Everything grew confused in the shadows. The hand that tried to push me away felt my heart beating...Our souls met and multiplied; another was born each time we kissed. Though it became less tumultuous, the intoxication of our senses did not yet allow us the use of our voices...All this had been a little abrupt. We realized our error and returned to what we had passed over in haste...Calmer, we found the air purer, cooler. Earlier we had not heard how the river, its wavelets bathing the walls of the summer house, interrupted the night's silence with a gentle murmur that seemed in harmony with the wild beating of our hearts. In her greater abandon, she seemed all the more ravishing...."Oh" she said in a heavenly voice, "let us leave this dangerous place; our desires keep multiplying here and we haven't the strength to resist them". She led me out.*[98]

...Or at least that is similar to what they told the guests. It is known that Richelieu, despite his seventy-eight years, had bounded out of the house with the actress, the most famous lesbian in Paris. The two returned half an hour later with their reputations bolstered by the adventure. Whether or not the Temple was the site of the physical act of love can not be known for sure. Police reports of the

---

[96] Georges Poisson, *Evocation du Grand Paris* (Paris,1960).
[97] Roque de Fillol, p 108. Quote by Abbey Leboeuf.
[98] Vivant Denon, "No Tomorrow," pp 738-739. The story of a one night seduction in a Temple of Love in *The Libertine Reader* (New York, 1997).



10
The Temple of Love at Gennevilliers photographed in 1896 before it was demolished.

goings on at Parisian "Petite Maisons" revealed the rumors of sexual adventures and orgies to be more story than reality, but still somehow valid in the world of intrigue.

Reflection 2

The Temple provided a place for anyone to take on a new role, to act out freedom in the absence of structure, or at least to act as he or she pleased beyond the restrictions of etiquette. But it is still acting, for what is freedom?

Narrative 3: Double Death

> *I began to weary of gardening at Gennevilliers and of building on the Boulevard. I became tired of Gennevilliers, of the icehouse, of the Temple of Love with its dome crowned with a winged Mercury who danced in the wind, and of its perspectival avenues. I also lost the taste for hunting while in the common chase to kill a partridge; I had the unfortunate luck to kill a man by mistake. I at once put away my guns and gunshot and never again pulled the trigger. Gennevilliers could never in my eyes recover from the melancholy curse of this accident. I sold the property to the duc de Choseil.*[99]

In 1888, Roque De Fillol visited the temple a few years before it was demolished (fig.10):

> *The only access to the little round temple which crowns the ice-house is by an exterior stairway built of various fragments of rotten planks placed one upon the other and truly unstable. The paintings on the inside of the dome are not yet entirely gone...As for the columns, one would believe them to be marble, but they are simply wood painted from the base to the capital. The statues are made of putty or perhaps of plaster. Everything speaks of the era of which Richelieu decidedly is a strong representation: he loves things dazzling and loves to eat well.* [100]

---

[99] Quinot, p 131.
[100] Roque de Fillol, p 109.

In the twentieth century, the land of the estate at Gennevilliers was buried under one of many experimental housing projects called "La Cité Jardin."

Reflection 3:

What then, is revealed in these two deaths, the death that causes the client to leave the site, and the death of the building?

Richelieu is indeed an actor, and a "strong representation" of his era. His life was a great act played out before the audience of the court and his architect was the greatest stage designer in France. A perfect match.

Servandoni's Temple of Love was paper thin. Having the appearance of the stone monument at Tivoli, time revealed it was only a stage set. It was a convincing one; even one hundred and thirty some years after it had been built, Roque de Fillol had at first sight thought the columns were of marble. The plaster pagan divinities had crumbled and washed away with the rain, only their stabilization rods remain in the photos taken in 1896. Mercury had been stolen only a few years after the Duc sold the property. In 1914, only the *glacière* remained, its ice melted.

> *Change of self is loss of self to these poets. Their metaphors for the experience (of love) are metaphors of war, disease and bodily dissolution. These metaphors assume a dynamic of assault and resistance. Extreme sensual tension between the self and its environment is the poets' focus, and a particular image of that tension predominates. In Greek lyric poetry, Eros is the experience of melting.*[101]

[101] Anne Carson, *Eros the Bittersweet* (Princeton, 1986), p 39.

CONCLUSION

> *A structure catches the eye by virtue of its mass; its general outline attracts or repels us... One sensation induces quiet reflection; another inspires awe, or maintains respect, and so on. What are the causes of these various effects? Their existence is in no doubt; and this becomes still more apparent if we combine Painting and Sculpture with Architecture. Who can resist this threefold magic, which addresses almost all the affections and sensations known to us. To satisfy ourselves on this point, we have only to look at our stage decorations, which use the mere imitation of works of Architecture to govern our affections.... The celebrated Servandoni, whose fertile genius and mastery of the secrets of his Art have so surprised and delighted us in the theatre, once contrived in a mute Spectacle, to make us feel the burning heat of the Sun.*[102]

Art and architecture underwent a great change with the democratization of space fueled by the liberation of the individual. The search for the genius or meaning in architecture and society led to a systematization of the emotions and sensations, grounded in an empirical understanding of the relation of built form to the individual. The new freedom given to society with the dissolution of the ancien régime and the loss of the authority of antiquity was replaced by a Newtonian faith in observation where the eye became the primary sensory organ. The new and democratic perspectival world of theatre was represented as a clear source of these realities, its power was amplified by its combination with Architecture and Sculpture. A sense of safety or security could be found here, providing grounding in a world that had lost itself. It offered a system governed by rules that could intoxicate the viewer without risking his life. The libertine knew this world intimately. He took his freedom to the limits, indulging in wonders, illusions and pleasures hitherto unknown to him. Ironically, it was a freedom that he knew to have boundaries, but which he accepted as a common understanding amongst his equals in lieu of the alternative (lovesickness) where man would lose his freedom. The threshold to this freedom was Eros, true love and the element that would reveal it was time. Architecture suffered the same

malady, collapsing the space between the observer and the observed, between space and time, the space of representation. Architecture emerged as the manipulation of spaces based on a formula of the senses and use. At the threshold of these changes, Giovanni Servandoni, the most skilled magician of manipulating the senses through the employment of all the arts builds the Temple of Love, a crystalline form based on classical examples and allegory infused with wonders of sight, sound and smell and all the senses.

Parisian memoirs often noted the two oddities surrounding this design which did not conform to their sense of decorum, its base of ice and its crown of Mercury. While Servandoni clearly understood allegory and its appropriate use depending on the occasion, these elements stand out. His familiarity with the client and his participation in the libertine world of theatre and pleasures indicate that his intentions here may have pointed to an ironic statement of the condition of Eros and architecture. Love could no longer be free; it would remain frozen until released by a reconciliation of time and space, like Mercury, neither solid nor liquid, a state of the in-between.

From our technological world-view, the architects that are most often promoted in the eighteenth century are those who inevitably fathered the birth of our tradition of function and reason, those who supported a positive beauty, which could be readily understood by common sense. Servandoni, while at once becoming the master of the domain of the theatre and whose work helped initiate architecture as representation, perhaps left an ironic note at Gennevilliers, a note which signaled the suspension of the erotic as possible meaning in architecture.

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[102] Le Camus de Mézières, *The Genius of Architecture.* p 70,71.

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Use of Computers and the Internet to Facilitate Export of Prefabricated Housing from Canada

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July 1999

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirement of the degree of Master of Architecture

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Abstract

Shifting demographics and economic factors have recently necessitated the export of prefabricated homes. With respect to trade in the global market, home manufacturers can greatly benefit by using E-commerce and digital networks to communicate with their foreign clients.

The author proposes a software application to assist Canadian home prefabricators and manufacturers of building components to display their services and products in an interactive and electronic format. This tool would help these companies by increasing the size of their potential client base and the speed of their business interactions.

The study concludes that specialised software to facilitate the export of prefabricated homes can easily take advantage of the Internet's speed and accessibility as a download or Website as well as be available on CD-ROM.

Résumé

Les nouvelles réalités démographiques et économiques de notre société ont récemment favorisé l'exportation de maisons préfabriquées. Les manufacturiers de ces maisons peuvent grandement bénéficier de l'utilisation du commerce électronique et des nouvelles technologies de l'information pour demeurer compétitifs au sein des marchés globaux.

L'auteur propose un logiciel permettant aux manufacturiers et fabricants de maisons préfabriquées de présenter leurs produits et services de façon électronique et interactive. Ces compagnies pourraient alors atteindre une clientèle potentielle élargie et améliorer la vitesse de leurs interactions avec celle-ci.

L'étude conclue qu'un tel logiciel pourrait être accessible par téléchargement. via un site Internet ou bien sur CD-ROM. Ces moyens permettraient de prendre avantage de la vitesse et de la facilité d'accès de l'Internet.

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CHAPTER ONE: INTRODUCTION

1.1 Rationale for the Study

With the proliferation of the computer and Internet technologies, the manner in which companies conduct many standard business dealings is constantly evolving. In order to stay competitive, the prefabricated housing industry, despite a foundation in manufacturing of quality and expertise, must similarly adapt to a contemporary era of advanced communication. This is particularly relevant to the multitude of prefabricated housing manufacturers who wish to expand their businesses into the export market thus benefiting from the potential gains of trading within the global economy. Over the course of the last five decades, Canada has experienced a steady decline in the number of housing starts, a trend from which Québec is no exception. The reasons for such radical shifts in housing requirements can be to demographics and economics.

1.1.1 Demographics

A foremost consideration in the approach to contemporary housing recognises that while the number of families and households in Canada is increasing, the size of these domestic arrangements is decreasing. It is also essential to distinguish that fewer Canadians are living within families. The subsequent effect is realised in a demand for smaller housing units to accommodate a smaller number of occupants. The diverse array of household compositions correlates accordingly with these demographic shifts. The disruption of the traditional family is exemplified by the increased incidence of divorce in Canada and the consequent increase of

single-parent households, a number which rose by over 31% between 1986 and 1991.[1] Further defying the definition of the "universal family" is the increase in common-law households, a composition that accounts for one in ten families.[2] The single-person household is also a rising trend that challenges the range of potential investors in the home-buying market. Cultural factors also amplify household diversity, such as the cohabitation of multiple generations within a single household.

Furthermore, as Canada progresses toward the 21st century, the impact of the population's age structure upon the housing industry is an inevitable criterion for future consideration. As the youth bracket recedes, the baby-boomers (i.e. those born between 1946 and 1966) validate the prospect that fewer numbers of young people will be "supporting" a greater number of older people. In anticipation of this surge, many baby-boomers are now taking active measures to safeguard against a precarious future of insufficient or non-existent government pensions (e.g. the uncertain future of tax-deductible RRSP contributions), unstable job markets and shortages of viable housing options.[3]

The diverse array of dynamic household types undergoes numerous changes in composition in natural progression from stage to stage in their evolving life cycles. In order to accommodate the fluctuations and transitions in contemporary households, responsive and adaptable housing forms are required. Additionally, effective communication, using computer technology to access the global markets, is a pertinent element through which to supplement the decreasing local housing demand and increased activity within the Canadian housing industry.

---

[1] Statistics Canada. *Age, Sex and Marital Status* (Ottawa: Supply and Services Canada, 1992) Catalogue no. 96-304E.

[2] Statistics Canada, *1991 Census Highlights as Released by the Daily* (Tuesday, 11 May, 1993: "Education, Mobility and Migration, and Shelter Costs") (Ottawa: Supply and Services Canada, 1994) Catalogue no. 96-304E.

[3] David J. Krawitz, "The Canadian Housing Affordability Challenge," *Open House International* 22.4 (1997): 6.

1.1.2 Economics

The upheavals in the global economy in the last fifteen years have taken their toll on both international markets and the individual citizen. Government budgeting for deficit reduction has led to dramatic cutbacks in social services and jobs; recessions and limited economic growth have deterred potential investors, employers and the average consumer; and the restructuring of many traditional arenas of commerce has resulted in redundancies and precarious employment security. With the average Canadian annual family income at $56,269,[1] combined with declining economic confidence, the number of housing starts has consistently decreased with a 30% differential between 1993 and 1997.[2] Given these parameters and an estimated median value of an owner-occupied dwelling in Montréal at $120,000, the home ownership bracket is significantly narrowed.[3] The slow-down in the Canadian real-estate market of the late 1980s and early 1990s, combined with the doubling of land prices and infrastructure costs, is characterised by companies no longer willing or able to take bold financial risks in local housing developments and exposing the global market as a significant potential supplement to decreasing local activity.

The "move-up" market of Canadian homeowners is also smaller now than ever before, instilling the renovation sector as a more viable alternative than the new-house market. First-time owners who are reluctant to sell their starter homes in a depressed market are opting instead to renovate with the ready availability of products and technologies as a means to home improvement. Renovations made for the purpose of energy efficiency alone increase the comfort of the residents and enable energy cost savings of between 15% and 35% annually.

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[1] Statistics Canada, *Average Annual Income* (Ottawa: Supply and Services Canada, 1997) Catalogue no. 13-207-XPB.

[2] Statistics Canada, *Housing Starts* (Ottawa: CANSIM, 1998) Matrix 9715.

[3] Statistics Canada, *Occupied Private Dwellings* (Ottawa: Supply and Services Canada, 1992) Catalogue no. 93-314.

During economic slumps, competition for renovation work is eminently prevalent in all segments of the housing industry (building material manufacturers, distributors and retailers, renovators, contractors and traders), creating a buyers' market where homeowners can plan low-cost renovation projects.[1]

1.1.3 The Need to Export

Housing manufacturers must react to dramatic changes in the domestic housing market and focus their efforts on the export potential of Canadian housing and building products. The global economic climate is presently well-suited to new trading opportunities and must take advantage of large-scale issues such as freer trade between international economic and political barriers and the increased accessibility of long-distance communication and interaction.

The high demand of housing in overseas markets and the projected decline of the local Canadian housing industry provide the framework for an intriguing alternative to the traditional, conservative conventions of the current industry norms. This transition to the international market has been greatly facilitated by conducive global geopolitical changes such as NAFTA, whereby an open trade corridor was implemented to simplify trade procedures. In addition to the multitude of fundamental demographic and economic shifts in Canada, an expansion of the housing industry during the 1980s witnessed an increase in new companies who are now willing to compensate local volume deficiencies with activities abroad.

The variety and abundance of natural resources, a high quality of workmanship for cold-climate construction, relatively inexpensive hydro-electric power and efficient communication

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[1] National Housing Research Committee (NHRC), *Housing Research Priorities Identified by the NHRC in 1990-92 with Additional Issues for 1995* (Ottawa: CMHC, 1995) 16.

and transport systems combine to advocate Canadian products as highly competitive on the international market.

The author suggests that it is essential that Canadian housing manufacturers react to the dramatic changes in the domestic market and focus their efforts and direct attention on the export potential of housing and building products. The global economic climate is prime for innovative trading opportunities passed, not only by more liberal international trade barriers, but also by the increased accessibility of long-distance communication and critical interaction through various established electronic networks.

1.1.4 Three Tested Arguments

Argument 1: Due to the lack of local residential construction activity, Canadian home manufacturers must gain full advantage from export in the global market, by introducing or restructuring their utilisation of electronic media, in order to survive.

Test 1: Considering the rebound of the housing market and the increased demand for the construction of new dwellings across Canada, there is little need for Canadian housing manufacturers to invest their energies into developing a highly sophisticated network for trading in the global housing-export market.

Argument 2: The Internet is a promising medium for the global marketing and trade of Canadian pre-manufactured homes.

Test 2: Due to the complex and non-specific nature of selling and marketing homes, prefabricated housing manufacturers may find it hard to justify the increased cost and effort required to export on the Internet as a substitute for traditional methods.

Argument 3: Interactivity between the customer/client and the builder/developer is essential for the home manufacturer to trade successfully in the global export market of housing.

Test 3: In the process of providing prefabricated homes, builders can sacrifice valuable time and productivity when allowing clients to be too involved in the design phase of a project.

1.2 Previous Research and Development

This section will examine the ventures undertaken by other companies involved in the prefabricated housing industry which are being implemented to facilitate export opportunities. In addition, precedents of companies involved in various areas of industry and business who already utilize the World Wide Web or Internet as a global trading and communication tool will be established.

Based on the literature review, the majority of the research executed by housing export consultants (either performed by academic institutions or private consultants who have a grasp of market conditions due to their interaction with the industry) is accomplished by observing previous market trends and socio-economic factors relating specifically to home buyers. Canada Mortgage and Housing Corporation (CMHC) is a government-funded agency which undertakes and supports research in various housing-related areas. Due to increased activity within the field of export, CMHC has recently documented numerous projects concerning the export of housing by Canadian manufacturers. These reports focus their objectives on the study of individual aspects particular to the multitude of fundamental issues pertaining to the export of housing. Consequently, a brief analysis of a selection of recent publications will enhance the perspective and understanding of the specific problems and requirements pertinent to this field of research.

Canada is one of the key players in the housing export market. The abundance of natural resources, a well-developed economy and the inherent ability to efficiently transport and deliver housing and related products across a large, geographically and climatically diverse nation has enabled Canada to make the transition into foreign housing markets with relative ease. Fundamental to export potential is the need to assess the role of competition prevalent in the export market. *Canada's Competitors in International Housing Markets* examines three rudimentary aspects of competition:

> "• Factors driving companies and countries to enter international housing markets today, and the ways in which they are doing so;
>
> • Ways in which other governments support their firms in entering international markets; and
>
> • The state of competition in target markets of interest to Canada, both from domestic and foreign firms."[1]

To address these topics, the study provides an analysis of six international competitors in the market by reviewing the framework and structure of export strategies, the impact of corporate subsidies from their respective governments and the political stability and housing demand in countries of potential interest to Canadian firms.

An additional prime area of concentration in the research of housing export is to examine the existing structure of government programmes and services which are currently available to support the international commercial endeavours of Canada's housing industry.[2] These resources relate to areas such as data and market research, export promotions, financing and insurance provided by federal and provincial departments and agencies, as well as by the academic and business (private on non-profit) communities.[3] In terms of past experience, the transfer of technology through traditional channels by suppliers has, in many instances, led to a

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[1] Canada Mortgage and Housing Corporation, *Compendium of Research* (Ottawa: CMHC, 1984-) 84.
[2] Ibid., 85.
[3] Ibid., 87.

series of critical asymmetries in the export process. Studies on experiences with individual developing countries have documented the indiscriminate export of technology that involved high costs and inefficient management and construction procedures.[1] By extension, further studies provide strategic frameworks through which a context can be developed in order to deploy the government's housing-related export support activities and resources.

The appropriate nature with respect to exporting housing is also a topic of concern, analysed by researchers in various CMHC documentation. Issues that require attention are the suitability of Canadian technologies in specific markets and the determination of specific regions which are most promising for this form of trade. *Overview of Housing Export Opportunities for Canadians* (1996) provides analyses of both international housing opportunities and the successful markets for sales of Canadian housing-related products, technologies and services. These are studied through the compilation of data which is displayed as charts and tables illustrating how companies can position their assets in relation to global trading possibilities.

Considering the widespread use of the Internet has increased tremendously in only the last few years, justifying the abundance of current studies published of this phenom. The focus, with respect to doing business on the Web, is approached from different areas of concentration: the most distinct division is that between concerns of technical and marketing natures. Clearly, housing exporters must address both these issues with perhaps a balance different to that of companies in other areas of business also using the Web for trading purposes. For example, since building a house is far more complex a task that has a greater client input than marketing and selling other products, home manufacturing companies would be more likely to consider sophisticated features such as interactive modes to allow the client or user to make choices, or the potential for users at both ends to communicate with the advantage of being able to update information on each other's screens. These capabilities may require specialised equipment but

[1] Singer et al., *Technology Transfer by Multinationals* (New Delhi: Ashish Publishing Co., 1988) 8.

could allow for savings in time and money. Ultimately, another effective method of researching in this field is to simply surf the Web and observe what companies are doing, especially those involved in the housing and building product industries, and the ways in which these uses are changing.

There is also research currently being undertaken relating the marketing and selling of Canadian manufactured homes in the global electronic network, such as a feasibility study for the establishment of a housing export Website at CMHC. Much can also be learned from companies that produce housing or manufacturing housing-related building products who have already created a presence on the Web, even if the current function of these sites is simply an electronic catalogue. The development of this potential will no doubt increase in order to allow housing exporters to benefit from the evolving utilisation of the Internet as a business medium.

1.3 Research Question

1.3.1 The Main Question

How can the use of computers and the Internet facilitate the export initiatives and practises of prefabricated housing manufacturers in Canada?

1.3.2 Sub-Questions

How can the introduction or restructuring of the use of computers and Internet technologies facilitate the export of prefabricated homes from Canada?

Is there a need for manufactured Canadian homes to have a presence in the electronic global market?

Should customer or client interactivity and input be considered in the export of prefabricated homes from Canada?

1.3.3 Glossary of Key Words

The following is a list of definitions of key words with a particular application to housing:

computer:	computers and computer networks are used by home builders and prefabricated home manufacturers as tools for design, costing, correspondence, payment and shipping.
Internet:	global digital communication and information network: used for transferring electronic data.
export:	trading and shipping of goods/technologies to foreign markets.
prefabricated homes:	residential building modules or units manufactured under controlled conditions in a factory (i.e. off site) typically using standard wood frame construction techniques (other modular or standardised methods are also used).
interactivity:	in this case, user involvement in the design of a house with respect to layout, choice of materials and finishes, components (e.g. fixtures, hardware), and time schedule.
customer:	buyer of home: could be a developer, builder, general contractor or private home buyer.

1.4 Objectives

The author wishes to study:

- Prefabricated housing process and its ability to be adapted for export purposes.
- Associated tasks and responsibilities of a prefabricated home manufacturer.
- Export practises of companies involved in this industry.
- The potential and limits of Internet technology with respect to doing trade locally and internationally, in fields as complex and technical as the housing and building product industries.
- Analyse and study systems for displaying and ordering housing and building products in the local and foreign housing markets using computers and the Internet. The required use or purchase of software, hardware and expertise will also be addressed.

1.5 Scope of the Study

The author will address the issues of the prefabricated housing market in Canada (with a specific case study taken from within Québec) and its associated practises using computer and Internet technologies in the context of trading in both local and foreign export markets. While Chapters 2 and 3 are based on research and observation in the previously stated fields. Chapters 4 and 5 deal with specific solutions or proposals which can be applied to these areas of research. Chapter 5 consists of the description of a software tool whose logic and layout was designed and prepared by the author

1.6 Methodology

A possible approach to the development of a methodology is to perform an analysis of a study which has documented the present conditions and future outlook for Canadian housing exporters. Therefore a review will be made of *Canada's Housing Export Experience and Prospects* (Ottawa: CMHC, 1996) written by C. David Crenna. This report provides information on three main approaches relating to the study of the business ventures of Canadian home builders who trade in the global market: it documents the recent expansion of Canada's housing exporters, describes the factors contributing to their success in an international context and gives a forecast of the increasing potential gains for companies entering or still trading in this field in the future.[1] The study concludes by reviewing how the private sector and governmental bodies can cooperate by working together to seize export opportunities that have little precedent in the history of the global economy.

The author introduced the major players involved in the field. By studying the local and foreign markets of home builders and the related businesses, it is noted that the financial basis of Canada's housing exporters is domestic construction and renovation activity. The local industry is valued at approximately $40 billion annually, providing as many as 300,000 jobs through 15,000 home builders and land developers involved in residential construction, along with 66,000 trades contractors (e.g. plumbers and electricians).[2] All of these businesses are supplied with materials and components by 4,500 Canadian-based and foreign manufacturers. The decline in the demand for domestic housing creates a more competitive local marketplace and higher standards, which prepares these companies for foreign competition in the international market. This latter trade is even more important during slow periods in the local home-building economy.

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[1] C. David Crenna, *Canada's Housing Export Experience and Prospects* (Ottawa: CMHC, 1996) iii.
[2] Ibid., 1.

Through surveys of 100 of Canada's largest housing exporting companies, the authors clearly recognised that companies engaged in exporting homes or investing in foreign residential development form only a small part of the industry as a whole. The main success is business done by companies trading housing-related commodities and products ($14.5 billion a year) with a strong contribution made by companies involved in licensing manufacturing and building technologies and others which sell services such as design and project management (Table 1.1).[1] Examples of these successful building products are items such as plywood and OSB (oriented strand board or Aspenite) sheathing both of which rely on Canada's large forestry resources and wood product manufacturing industries (Figure 1.1). Marketable building technologies, such as steel frame residential construction and permanent insulated formwork and concrete systems, are developed in Canada, motivated by the desire to have more energy efficient buildings with a reduction in construction time Figures 1.2 and 1.3).

A detailed statistical analysis is shown of the breakdown of the international activities of the Canadian housing industry and its companies. Quantitative data, such as volume of business, number of employees and business shares, are compiled and displayed graphically. In addition, specific examples of companies are given. Again factors, e.g. employment, production and manufacturing outputs and sales distribution, are quantified and explained with respect to possible influences. A broad range of companies are looked at in order to give an indication of the variety of company sizes and the associated practices and trade which occur as a result of facilities and financing available.

Through devoting a chapter to housing export trends, the author determined which housing-related exports are the most successful, and prepared extensive tables of the annual trade values of individual building products and services from the years 1990 to 1996 inclusively. The

[1] Crenna, *Canada's Housing Export*, 2.

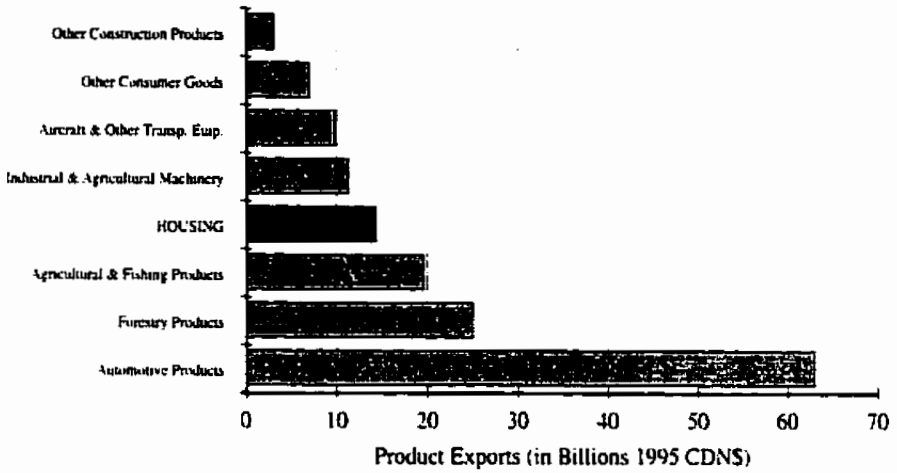


Table 1.1 Export of housing products compared with other groupings (Statistics Canada. 1995)



Figure 1.1 Wood-based sheathing (Norbord Industries. 1996)



Figure 1.2 Steel frame construction (Canadian Sheet Steel Building Institute, 1993)

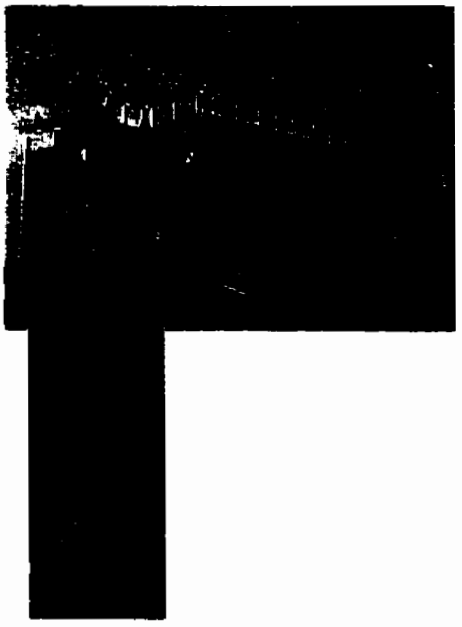


Figure 1.3 Permanent insulated formwork/concrete systems (Polycrete Industries/AAB Building Systems, 1995)

fastest-growing exports of housing products and commodities are highlighted in order to observe any trends which may be apparent. The role of higher value-added products is also examined. These products use raw materials that are turned into items many times more valuable in terms of cost than the original materials, (e.g. appliances and electronic equipment), and have also exhibited rapid rates of growth in sales. Overall, the United States is still the predominant importer of Canadian building products and of softwood lumber (including 2x4 wood frame construction systems) accounting for approximately 70% of sales in both areas.[1]

In order to gauge the prospective markets for Canadian housing exports, all of Canada's existing trading destinations are studied with respect to political and economic climate, housing trends and policies, previous trade with Canada, and the emergence of freer trading arrangements.[2] In many cases, specific occurrences in the global landscape, such as conflicts or mass migrations, can have a direct effect on Canada's role in housing exports. This concept is reinforced through the analysis of Canada's advantages in international housing markets. According to the study, some of Canada's strengths are its efficient and relatively low-cost manufacturing processes, highly developed transportation systems, large reserves of natural resources, the support of stable financial institutions, high regulatory and quality control standards (e.g. the National Building Code) and a worldwide reputation for honesty and quality in its business practices.[3]

Through the use of detailed, up-to-date surveys and analyses, the author has provided an accurate picture of the situation that Canada's housing exporters face. The understanding of which building products, commodities and technologies are appropriate for specific markets is invaluable for gaining an understanding of how the industry may approach the business of selling homes across the world. Therefore, the main chapter of this thesis will describe a tool

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1 Crenna, *Canada's Housing Export*, 14.
2 Ibid., 20.
3 Ibid., 29.

that has been proposed to benefit housing exporters in their task of displaying and communicating specific building products and housing systems for foreign markets. This tool was specifically developed as a software application to showcase the Next Home™ demonstration unit, which was built as a research project undertaken by the Affordable Homes Programme in the Master's Housing Department of the McGill University School of Architecture in 1996.

1.7 Structure of the Thesis

The proposed area of interest can be simply isolated into two distinct fields of study: housing and Internet technologies. The former encapsulates the following disciplines of the Canadian housing market: its history, the use of prefabricated systems, Canada's housing export strategy, export of housing with an emphasis on modular and panelised systems, and adapting housing to suit foreign contextual requirements.

The latter incorporates an in-depth analysis of the evolution of the Internet and the facilities and functions available through this technology. The ways in which companies in other fields utilize Internet potential (i.e. for exposure, marketing or selling products) will be examined in order to develop a similar methodology relating to prefabricated housing manufacturers. Requirements in terms of software and hardware will be determined, as well as the specific expertise needed in order to establish, maintain and trouble-shoot any systems that are developed or implemented for these types of companies. There also will be a description of the future prospects and possibilities of business procedures performed on-line incorporating the specific requirements of housing manufacturers.

CHAPTER TWO: CANADA'S EXPORT OF PREFABRICATED HOUSING

2.1 The Housing and Building Product Market

2.1.1 Historical Background

With the increased demand for housing in post-World War II Canada, the home-building industry had to adapt to the specific requirements of a construction boom. In the period since the late 1940s, Canada tripled its housing stock with the addition of six-and-a-half-million new dwellings.[1] Large suburban developments of single-family homes required the use of a prototype that could be constructed quickly and at low cost to both developers and buyers. This prototype also had to be energy efficient, especially with rising energy costs, in order to provide comfort during the extreme weather conditions experienced in our country. The industry also needed to rely on local resources to develop a strong domestic industrial base in building products which could also become a key aspect of foreign trade. The result was an efficiency, with respect to construction techniques and practices, that has evolved and been refined over the second half of this century, allowing builders to construct homes which are simply and inexpensively built to relatively high standards of quality and low energy consumption.

Canada is a vast country with an abundance of natural resources. Historically, Canada's economy has relied on these resources to create jobs and to prosper financially in the global market. Because forestry is one of the largest industries in the country, Canada's housing

[1] Canada Mortgage and Housing Corporation, *Housing in Canada, 1945 to 1986: an Overview and Lessons Learned* (Ottawa: CMHC, 1987) 33.

stock has relied almost exclusively on wood-frame construction. This framing system profits from the cheap availability of small sectional timber framing members, with the added advantage of its inherent modularity and ease of construction (Figure 2.1). As well as being lightweight and structurally integral, standard wood-frame construction also allows for high thermal insulating properties and is flexible in terms of future adaptations to the structure or to interior partitions, and lends itself well to the use of prefabricated components. Now, more than ever, prefabrication of wood-frame wall panels and building modules is becoming more popular, as financial and timing concerns are of greater importance to both developers and consumers. Prefabrication allows for even more standardisation, better quality control and a reduction in costly site construction time (Figures 2.2 and 2.3).[1]

2.1.2 The Shift in the Market

A number of factors are changing the Canadian home-building industry. As housing starts across the country become more infrequent, the industry has to find different alternatives in order to survive, especially in the winter months when residential construction activity varies seasonally, slowing down in Canada's cold and harsh winter climate. With the decreased demand for domestic housing and the increase in homeowner renovations and upgrading, housing manufacturers are anxious to expand into international markets. The slow population growth, shifting demographics and family profiles, and political and economic uncertainties all contribute to the weakening of the industry's traditional base of domestic home-building in Canada.[2]

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[1] Jonathan F. Hutchings, *Builder's Guide to Modular Construction* (New York; London: McGraw-Hill, 1996) 6.

[2] Canada Mortgage and Housing Corporation, *The Housing Industry: Perspective and Prospective: Summary Report: the Changing Housing Industry in Canada, 1946-2001* (Ottawa: CMHC, Public Affairs Centre, 1988) 4.



Figure 2.1 "2 by" wood members (Rustad Brothers & Co., 1993)



Figure 2.2 Erecting wall panel (CMHC 1995, 5)

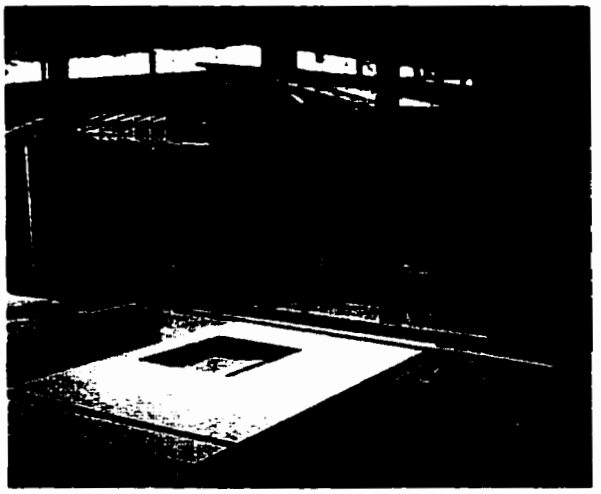


Figure 2.3 Modular plant (CMHC 1995, 3)

Homeowners can easily upgrade and renovate their homes. This is due mainly to the inherent simplicity of wood-frame construction and the recent increase in availability of building materials at large home renovating stores, such as Réno-Dépôt or Rona l'Entrepôt in Québec. These large building suppliers sell all the raw materials required to perform most types of residential construction and renovation. They also provide the knowledge and techniques required to perform simple construction tasks through the availability of "how-to" books and videos, as well as by offering customers the chance to participate in workshops and seminars. These courses provide do-it-yourself homeowners with expert advice and residential building tips relating to all aspects of house technologies, and cover a range of topics, from proper detailing to ways of improving the energy efficiency and thermal performance of one's home.

2.1.3 Prefabrication

The prefabrication of homes is a rapidly expanding segment of the Canadian home building industry, and is a key element of trade for those also wishing to compete in the home export market.[1] The modular nature of wood-frame construction allows for a very flexible and simple approach to residential home building. Each structural member is of a standardised dimension (e.g. wood studs and plywood sheets) and the regular spacing of the wood studs (either eighteen or twenty-four inches) directly relates to the standard four-foot width of plywood and gypsum sheets (Figure 2.4). A similar flexibility is also evident in the accommodation of many building components (e.g. doors, windows and kitchen counters) which are also manufactured to standardised dimensions. These prefabricated building components, specifically kitchen counters and roof trusses, are manufactured by many home building companies and are marketed individually, thereby increasing the opportunity for more export dollars for Canadian manufacturers (Figure 2.5).

[1] C. David Crenna et al., *Canada's Housing Export Experience and Prospects* (Ottawa: Advance Copy prepared for CMHC, 1996) 7.

2.2 The Potential of the Export Market

The downturn in housing starts has had a negative impact on the construction industry, causing down-sizing and layoffs. Tapping into new markets overseas is one way for companies involved in the home building and building products industries and those entering the export market, to create jobs in Canada, even when there is little demand for homes in the domestic residential sector. Building prefabricated units to fill orders destined for other markets also helps keep manufacturers busy in production during the winter months, when domestic orders tend to drop off (production smoothing), allowing them to keep their staff employed year-round. This also ensures that the factory is constantly busy and that the machinery is maintained in a well-oiled condition.[1]

Canada already has a highly respected image overseas as a leader in various aspects of building technology. It is important for manufacturers to take advantage of this reputation to generate more trade and to confirm Canada's role as a provider of efficient, inexpensive and well-manufactured housing solutions.

Prefabricated building units, regardless of whether they are of modular or panelised construction, are designed for easy and streamlined transportation. The standard width of prefabricated building modules allows them to fit onto a flatbed truck, which is similar to the size of a typical freight container (Figure 2.6). Various combinations of these narrow modules can achieve many types of successful floor plan layouts. Similarly, prefabricated wall panels are usually made to a standard height of eight feet, allowing them to be shipped at a high density, since they can easily be stacked horizontally to a given height while keeping the pile at

[1] Personal interview with Dr. Donald Chan; discussion about industrial production systems.

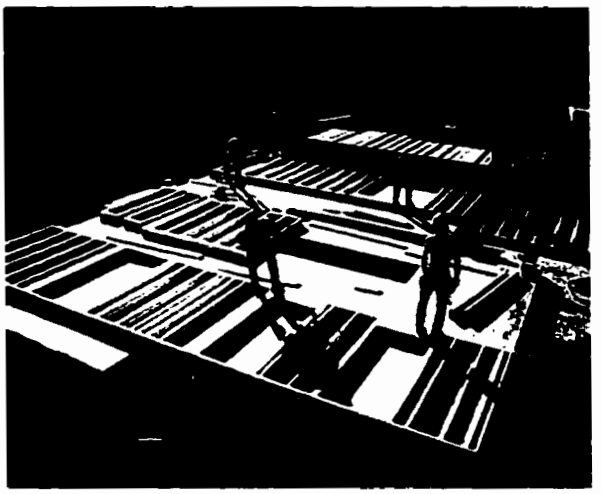


Figure 2.4 Standardised members in wood frame construction (CMHC 1995, 5)

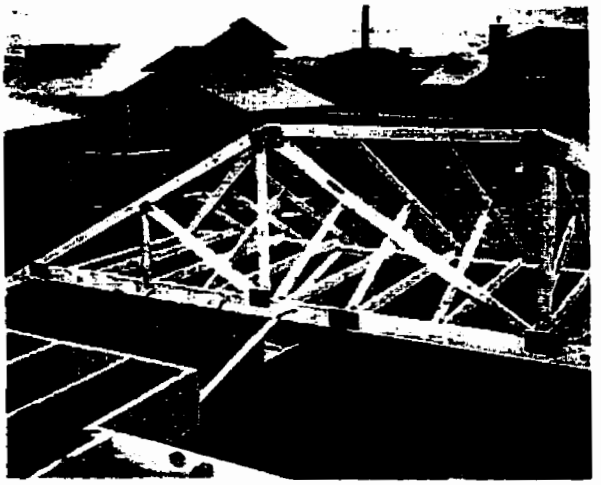


Figure 2.5 Use of prefabricated roof trusses (Lincolnberg International, 1994)



Figure 2.6 Transporting modular units (Scanada Consultants, 1996)

a maximum width of approximately eight feet – well under the maximum width for transport on road or rail systems (Figure 2.7).

2.3 Practises and Difficulties in the Export Market

There are other important issues that manufacturers need to consider. One of the major concerns with the export of homes to foreign countries is the need to conform to local requirements, whether they be standards based on regulatory or on cultural principles. The building's structure and envelope should physically relate to factors such as the local climate and building codes, while its layout and form must satisfy the human needs of the context in which the building is being constructed. While considering the local environmental conditions, the housing exporter must also look at the energy performance of the home. Building products are selected through a process of fulfilling such criteria as cost and energy efficiency. In many cases, mechanical systems may be needed to take better advantage of the building's thermal performance and to enhance interior conditions such as indoor air quality (Figure 2.8).

When considering factors such as the presence of running water, sanitary facilities, central heating and space per person, Canada is seen by many countries, including itself, as providing its citizens with one of the highest standards of living in the world. Boosted by its reputation for quality in these areas, the demand for Canadian housing-related products in other countries has grown. The Canadian housing export market has thrived in the past few years: in 1993 the total value of manufactured housing factory shipments was $778 million, with approximately 147 manufactured housing producers nationwide.[1] Another important factor in the increase of

[1] C. David Crenna et al., *Canada's Housing Export Experience and Prospects* (Ottawa: Advance Copy prepared for CMHC, 1996) 1.

manufactured housing exports is the current state of the local housing economy. With the decline of housing starts in Québec and across the country, housing companies are relying on their clients abroad to keep their manufacturing lines in production. Considering that housing construction is a seasonal venture, many companies depend on export markets to maintain financial security during the winter months. The controlled environment of a plant ensures quality control during the production stage, regardless of the exterior conditions, as no site work is undertaken during that time (Figure 2.9). Because few other countries in the world have access to such a wealth of lumber as a natural resource, and because of our high production standards, Canadian home manufacturers have a great deal to offer foreign buyers in terms of prefabricated homes and housing-related building products.

2.3.1 Response to Cultural Situations

The Canadian low-rise residential construction market is based upon wood framing, or stick-built, technologies. The acceptance of this technique may be considered difficult in other countries due to many factors, some of which require a determined and appropriate effort by manufacturers to overcome. In order for Canadian home manufacturers to successfully export to these countries, a structured response must be established to address these issues. This response can be categorised under two main headings: structure and the environment.

Structural stability:

- structural properties of materials used in home building;
- fire-resistance rating (i.e. knowledge of countries' codes and standards is required);
- seismic resistance through additional design (i.e. knowledge of countries' building and design techniques for earthquake zones is required).



Figure 2.7 Prefabricated wall panels (SRI Homes International. 1996)

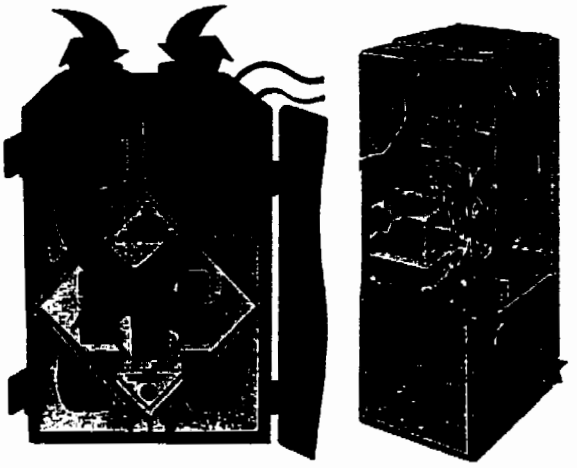


Figure 2.8 Residential mechanical systems (Venmar Ventilation/DMO Industries. 1996)



Figure 2.9 Factory built modular homes (Canadian Manufactured Houising Association. 1992)

Environmental responsibility:

- renewal of forests (i.e. is it possible to maintain a steady supply of lumber without depleting Canada's stocks; the responsibility and economic viability of the sustenance of forests through replanting and selective logging practices);
- abuse of old-growth forests (i.e. issues of heritage and conservation versus profits and the protection and creation of jobs);
- comparative amounts of energy needed for production of wood versus metal studs and concrete frames (i.e. profits and jobs at the expense of more pollution and the depletion of non-renewable energy sources).

General environmental issues concerning housing:

- energy efficiency (i.e. requirements for different climates: value-added features that raise the cost of production may affect the products' ability to compete in the global market);
- recycling programmes – recycled products used in construction and recycling of construction site waste (i.e. the potential market for such products: realistic methods of cost-effective production);
- indoor air quality (important for areas with high pollution quotient and for specialty markets, e.g. allergy-sufferers);
- materials (i.e. toxicity: gassing off; the environmental cost of production and shipping);
- water usage.

Canadian manufacturers must learn the subtleties of how to conduct business with foreign buyers, otherwise tensions can arise that can result in a loss of potential clients and jeopardise existing contacts. The proper way to conduct business can vary greatly from country to country, and any Canadian manufacturer who wishes to succeed in export trade would be wise

to research the business protocol of each new foreign market. It is also important that Canadian business people understand the social concerns of foreign cultures. Products built to suit a North American lifestyle may not be appropriate in other contexts. Factors such as how families are structured, and how day-to-day activities unfold within the private realm of the home (and in the more public aspect of the community at large) may place different demands on the design of prefabricated homes.

How, then, does a domestic company from Canada, or specifically Québec, deal and interact with businesses and peoples of different values, economies and languages? Manufacturers must commit the time and invest the funds to make first-hand investigations of their targeted overseas markets, and be willing and able to take years building solid professional relationships with foreign buyers if they wish to succeed.[1] This can be achieved through active means such as having trade representatives visit the countries with which the company is trading as well as placing professionals (i.e. builders or architects) in these countries to learn specific cultural and technical details.

There are also moral issues to consider when selling homes and housing products abroad. As previously mentioned, the Canadian standard of living is envied by many, especially by people in developing countries. Should our manufacturers hurry to exploit foreign markets for profit, if it means selling products that may not be appropriate, in the long term, for the people who buy them? In other words, is it morally responsible to profit from giving people what they desire, even if it may contribute to the gradual potential loss of their culture and natural resources? Canada's international image is key to sustaining the high regard and expectations of domestic companies and expertise, in the eyes of our trading partners.

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[1] Personal interview with employee of Modulex Inc.: discussion about forging economic and professional ties with foreign clients.

2.3.2 Climate and Energy

The local climatic conditions have a major impact on the typical construction methods used in the fabrication of a building. Whereas in Canada houses must be built to withstand extremely harsh winters, other regions of the world have very different environmental conditions to respond to. These factors must be studied in order to develop a tested system whose thermal performance is appropriate to the local environment (Figure 2.10). There are also some aspects of different climates which result in the utilisation of similar building practises and construction details: for example, a deep wall section is required in cold climates to allow for adequate placement of a sufficient amount of insulating material, while a hot climate will also necessitate thick walls to act as a heat sink that at night will give off heat that has built up during the daytime.

Wall sections may vary considerably due to different weather conditions, and the ideal choice of materials will also differ accordingly. Canada's winters dictate that high insulating values are required: for energy efficient housing construction, a value of RSI 5.1 (R29) is recommended for areas in which there are up to 3,500 degree days.[1] However in more temperate zones of the world, a lesser RSI value is permissible, so wall sections must be adapted accordingly. In some cases, it may be considered undesirable to reduce the wall thickness, as a large wall mass in warm climates can be beneficial. Again, acting as a large thermal mass, a thick wall will retain heat gained during the day through active solar gain and radiate the stored heat throughout the cooler nighttime hours. Other construction practises that are affected by climatic conditions are construction techniques, work schedules, seasonal practises and transportation routes.

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1 Canada Mortgage and Housing Corporation, *Energy-Efficient Housing Construction* (Ottawa: CMHC, 1982) 10.

Similarly, there are environmental and climatic factors which are closely related to code requirements and may affect them in certain ways (as shown in Table 2.1).

2.3.3 Building Codes

Any intervention, either initiated by foreign developers or designed abroad and carried out by local labour, must conform to all local building and municipal codes. Therefore, individuals and companies involved in building homes in foreign markets must gain a working knowledge of this fundamental stage of the construction process. This can be achieved through field study and by communicating with local experts and professional trades people. Examples of the issues relating to building codes and municipal regulations are shown in Table 2.2.

2.3.4 Transportation

The mode and system of transportation is determined after a consideration of the time factor versus the cost factor. For example, a company must decide between using shipping (water) routes or air routes in conjunction with an appropriate land or ground-shipping method (i.e. using truck or rail). The local site-access conditions and transportation facilities must be studied. A balance must be achieved between the expense in terms of money and the time spent. If shipping is used to save costs, needless use of air freight to rush a missing or broken component is a wasteful additional cost (Figure 2.11).

The coordination of materials and arrival times must be anticipated before the construction stage to ensure that all materials arrive at the appropriate times. They must also be organised in terms of their location. This requires that a company representative be involved in organising and



Figure 2.10 Measuring thermal performance (National Research Council, 1995)



Figure 2.11 Shipping modular units (Scanada Consultants, 1996)

Environmental Factor	Effect on Code Requirements
sun angles/conditions	no. of windows/sizes/location
wind/earthquake loads	wall foundation construction
rain, wind conditions	roofing materials, overhangs
temperature/humidity	insulation, moisture and vapour barriers

Table 2.1 Effects on environmental factors on code requirements

Strucutral Criteria	Code/Regualtory Criteria
Wall/foundation constuction/insulation	Density
Structural capacity	Zoning
Building height	Window size/daylight requirements
Seismic loads	Ventilation/indoor air quality
Flood areas	Plumbing/electrical
Ground/soil conditions	No. of families/occupancy
	Fire codes
	Exit/entrance requirements

Table 2.2 Criteria to be addressed through building codes

overseeing the schedules and tasks to be performed. Packaging the prefabricated panels is a process which most be carried out in the most efficient manner to ensure that shipping costs are kept to a minimum. The containers must be organised beforehand, so that the panels can be transported in the most efficient arrangement, with units loaded in the appropriate order to facilitate the process of unloading the parts in the correct sequence. Similarly, the containers and their contents must be organised such that breakages and omissions are kept to a minimum.

CHAPTER THREE: A CASE STUDY, MODULEX INC.

3.1 Company Background

Modulex Inc. is an experienced prefabricated home building company and has been conducting its business out of Québec City for over thirty years. Over that time period, it has constructed over 11,000 prefabricated homes and is currently involved in selling its prefabricated homes to 18 foreign countries including the United States, Japan, Russia, South Africa and Israel. Modulex is a member of the Canadian Home Builders Association (CHBA) and the Association provinciale des constructeurs d'habitations du Québec inc.(APCHQ). In 1977, Modulex developed a highly energy efficient type of construction called the Thermo-Plus system for applications in areas of extreme cold, e.g. developments in Northern Canada above the Arctic Circle.[1] The experience of producing such specialised systems has helped Modulex adapt to the specific requirements of producing prototypes for sale in the export market. For example the Thermo-Plus wall system uses a 2" x 7" stud wall (which is larger than the standard thickness) to allow for six inches of mineral insulation and an air space, within the wall cavity, in conjunction with a horizontal anti-torsion system. This panelised wall assembly was easily adapted for the Japanese market where a similar section was needed to withstand the required earthquake design loads. The author will analyse Modulex's mode of operation as well as specific design and technical issues which have been developed or adapted in order to successfully manufacture homes for foreign markets.

Although the export market and potential for increased growth is promising to the Canadian prefabricated housing industry, the future of this industry can by no means be considered

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[1] Modulex Inc., *Showcase of Homes and Cottages* (Québec: Modulex Inc., 1996), 1.

stable. The importance of diversity of products and services is essential when considering that the practise of exporting turnkey developments may well become less feasible economically. While the sudden growth in the export of prefabricated houses to foreign markets seems exciting, the advantage of the North American home building construction system will lose its edge. The technology of wood-frame construction and other prefabricated panelised wall systems for residential use will soon become locally available for many countries interested in the benefits of these systems. Due to the inherent qualities of these systems (e.g. low cost, fast turnover, high energy efficiency and excellent quality control), the industry in many foreign countries may adopt these building practises and manufacture these components themselves. Thus it is the prerogative of Canadian builders to shift their service and product responsibilities to respond to the emerging demand for supplying new technologies, raw materials and specific products, as opposed to the complete and final product.[1] It is for these reasons that Modulex is involving itself more and more with the export market. It still relies heavily on local clients and those in the Unites States for the majority of its business; however Modulex is counting on the favourable demand for Canadian housing, and associated housing technologies and systems, in order to increase its production capacity.

3.2 Current Mode of Operation

3.2.1 Marketing Stage

After all the factors relating to environmental and cultural contexts are analysed by the company, a marketing approach must be developed in order to build a relationship with

[1] Personal interview with employee of Modulex Inc.; discussion about the importance of establishing a large presence in foreign markets so that, in the future, Canadian prefabricated home builders can manufacture wall panels in factories built in these countries, thus saving money due to lower transport and labour costs.

Modulex's clients, whether they be foreign investors, developers, builders, architects, or others. Modulex has forged links with home builders' associations, government agencies (such as the Canada Mortgage and Housing Corporation) and foreign trade missions (e.g. Team Canada) which has helped the company build up a presence in the global market.[1] Similarly, their well developed Website gives the company a valuable presence on the Internet which can provide exposure for the business to potential clients all over the world. Further Internet links on other Web pages, such as Provincial and National home builders associations, can also give a useful prominence for the company.

3.2.2 Project Development and Design Stage

Once clients are found, the development of the design occurs, consisting of feasibility studies and the preliminary design. The company is involved in various capacities, depending on the circumstances and scope of the project. For example, a complete design of house could be done from the client's specific requirements, or could be taken from an existing model in the company's own catalogue (Figure 3.1). Similarly, the company often executes a redesign of a house taken from the catalogue or from an existing set of drawings. The most common situation, which occurs during projects targeted for export, is to create a set of working drawings of a design the latter of which has been supplied by the client and has been conceived by the client's own architect in the country in which client is based, thereby conforming to the local context (e.g. cultural requirements, building codes, municipal regulations and climatic conditions).[2] This process in itself is a large component of the company's business as Modulex must ensure that its designers have a good knowledge of the required design parameters and be able to communicate these issues quickly and efficiently to a client who is often located far away.

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[1] Personal interview with employee of Modulex Inc.
[2] Ibid.

3.2.3 Obtaining Financing and Permits

Financing is the most important factor in realising the feasibility of export of Canadian housing abroad. Housing export projects tend to be small and financed almost entirely by government loans. The Export Development Corporation (an organisation within the Canadian government) finds foreign developers who are interested in using Canadian technologies to build new housing developments. Loans are available from the Government of Canada to allow domestic home builders to find foreign clients. These foreign developers are in the business of building property developments for profit, which results from the quick sale or lease of a majority of the units. The financial risk for the developers is usually balanced by a high return on their initial investment. This trade allows domestic builders to have projects ongoing even when local starts in Canada are low or the cold winter months have slowed domestic orders, and guarantees them a good profit. The Canadian government also gains in this process as a result of taxes collected from the profits of the home building company. The local economy also benefits, since the Canadian company will have more business and therefore require the services of more local people in a variety of job positions, ranging from carpenters to architects and engineers to financial experts.[1]

3.2.4 Final Design

Many financial aspects need to be addressed, including the establishment of a line of credit through foreign banks. The correspondence of quotes and costs throughout the design stage is facilitated through the use of computers to transfer and update this information (Figure 3.2).

[1] Personal interview with employee of Modulex Inc.

Other tasks which need to be completed in-house, by the company's engineers, architects and administrative staff, are:

- obtaining building permit (i.e. project conforms to code);
- preparation of construction schedule (i.e. time is an important consideration when shipping items over long distances);
- resolution of the final design;
- completion of the working drawings (i.e. structural drawings; materials, finishes and doors/windows schedules; electrical; mechanical);
- preparation of the final cost breakdown.

3.2.5 Production

A house intended for export is prefabricated into individual wall panels inside the factory. This method is modular, economically competitive, ensures a high and controlled level of quality, and gives flexibility for custom designs. A sophisticated method of tracking wall panel components is used to keep an up-to-date and accurate inventory of parts (Figure 3.3).

3.2.6 Packaging and Transportation

Typically, door-to-door trucking is the industry standard for the transportation of prefabricated homes within the North American market. For overseas shipment, the main criterion is the time factor versus the cost factor. A balance must be achieved between expense and time when determining whether to use shipping or land routes versus air land routes (if and where possible). The scheduling and coordination of materials and arrival times must be anticipated before the construction stage, so that all building materials and wall panels are organised to

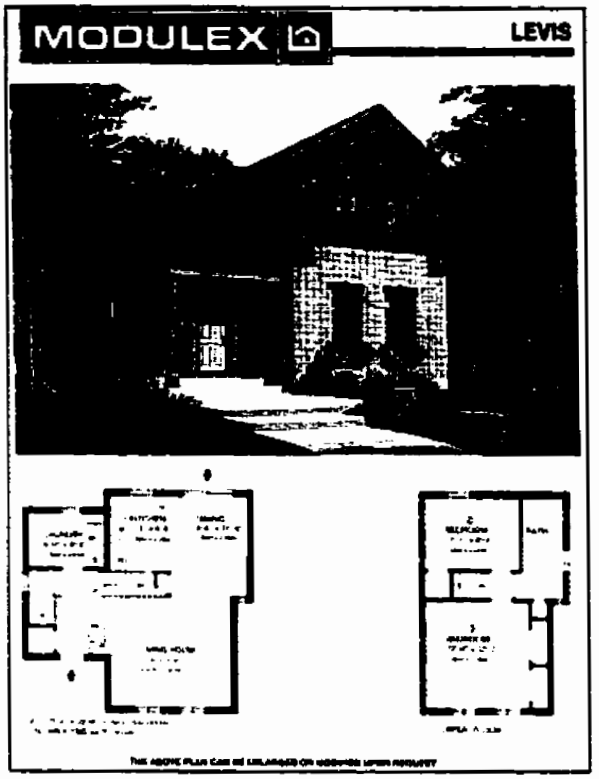


Figure 3.1 Example of model home in company's catalogue (Modulex Inc., 1997)

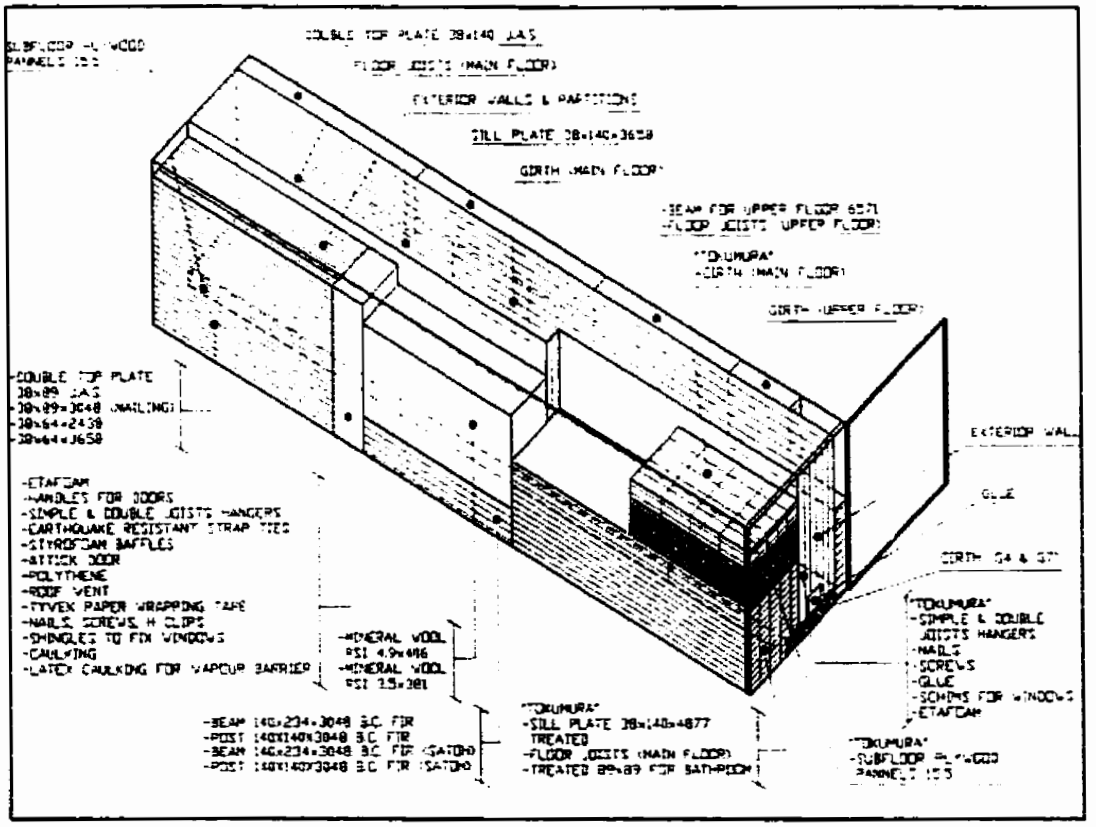


Figure 3.4 CAD drawing for arrangement of shipping container (Modulex Inc., 1996)

MODULEX Inc.

MODULEX inc

3090 Blv.Hamel
Quebec
G1P-2J1
(418) 681-0133

SELLER :	Modulex Inc	FILE	Japon
	KE-2034	Customer	Kenyu Kogyo
DATE :	09-Sep-96	MODEL :	Matsuda House
			29'-6" x 24'-6"

2 EXTERIOR FINISHES QUOTE — TOTAL $562

Exterieur Finishes based Upon

#18	Metal flashing for the roof edges.
#20	Aluminum soffit fully vented.
#21	Aluminum Facia 140 mm

3 EXTERIOR CANOPY QUOTE — TOTAL $2 301

Exterieur Canopy based Upon

Aluminum Post 18'Height (2)
Fypon moulding # 876
Aluminium handrail

4 WINDOWS / GLASS QUOTE — TOTAL $6 547

Low-E Glass with removable grille / Ext Vinyl Cladded #POLAR

	Code	Qty	Total
W1	BGBA8056-2	2	$ 1 667
W2	B2VA3956-1	7	$ 2 660
W3-OBS	B1VA2048-OBS	3	$ 692
W4	BIVA2048	2	$ 435
W8	F71T3816 without grille	1	$ 133
W9	B1VA2024	1	$ 160
PVC DECORATIVE SHUTTER		3	$ 800
			$ 6 547

5 EXTERIOR DOORS QUOTE — TOTAL $955

Insulated Steel Door with Vinyl Cladded wood frame #POLAR

	Code	Qty	Total
ED1 DOOR	LSBBA101-G	1	$ 955
ED1 SIDELITE	LS4BA11-G	1	INCLUDED
			$ 955

KE-2034.XLS

Figure 3.2 Extract from proposed quote (Modulex Inc., 1996)

NO DOSSIER 4/15
FILE NO 96-439/
NOM DU CLIENT
CUSTOMER'S NAME KENYU KOGYO(S.G. TRADING)

MODULEX

MURS EXTÉRIEURS
EXTERIOR WALLS

IDENTIFICATION DES MATÉRIAUX / MATERIAL DESCRIPTION	QUANTITÉS / QUANTITY	REQUISES / REQUIRED	CHARGÉES / LOADED A	A VENIR / TO DELIVER B
MURS 2" X 6" Contreplaqué TYVEK LATTES X J.A.S HAUT		PL	PL	PL
WALLS 2" X 6" PLYWOOD TYVEK Strapping X 8' HEIGHT	0	LF	0 LF	0 LF
MURS 2" X 6" Contreplaqué SEUL 3/8" J.A.S. X J.A.S HAUT		PL	PL	PL
WALLS 2" X 6" PLYWOOD X 8' HEIGHT	221	LF	221 LF	0 LF
MURS 2" X 6" Contreplaqué X J.A.S HAUT		PL	PL	PL
WALLS 2" X 6" PLYWOOD X 8' HEIGHT	0	LF	0 LF	0 LF
MURS 2" X 6" Contreplaqué X J.A.S. HAUT		PL	PL	PL
WALLS 2" X 6" PLYWOOD X 8' HEIGHT	0	LF	0 LF	0 LF
MURS 2" X 6" Contreplaqué X J.A.S HAUT		PL	PL	PL
WALLS 2" X 6" PLYWOOD X 8' HEIGHT	0	LF	0 LF	0 LF
SABLIERE DOUBLE EN 2" X 6" J.A.S		PL	PL	PL
DOUBLE TOP PLATE 2" X 6" J.A.S	240	LF	240 LF	0 LF
Contreplaqué 3 1/2" " X 6' J.A.S. HAUT MUR HAUT		Mcx	Mcx	Mcx
PLYWOOD 3 1/2" " X 6' TOP OF UPPER WALLS	0	Pcs	0 Pcs	0 Pcs
Contreplaqué 13 1/2" " X 8' J.A.S BAS DE MURS REZ-CH		Mcx	Mcx	Mcx
PLYWOOD 13 1/2" " X 8' BOTTOM OF WALLS	0	Pcs	0 Pcs	0 Pcs
Contreplaqué 3/8" 12" " X 8' J.A.S BAS DE MURS		Mcx	Mcx	Mcx
PLYWOOD 12" " X 8' BOTTOM OF WALLS	28	Pcs	0 Pcs	28 Pcs
LATTES 1" X 3" X 16' BAS DE MURS		Mcx	Mcx	Mcx
STRAPPING 1" X 3" X 16' BOTTOM OF WALLS	0	Pcs	0 Pcs	0 Pcs
CONTREPLAQUE 1/2" X 4' X 8' J.A.S. (POUR MURS)		FL	FL	FL
PLYWOOD 1/2" X 4' X 8' J.A.S. (FOR WALLS)	0	FL	0 FL	0 FL
TYVEK EN VRAC POUR MURS		PL	PL	PL
TYVEK BUILDING PAPER	300	PL	0 PL	300 PL
LATTES 1" X 3" X 8'		Mcx	Mcx	Mcx
STRAPPING	0	Pcs	0 Pcs	0 Pcs
TYVEK EN VRAC POUR BRIQUE		PL	PL	PL
TYVEK BUILDING PAPER (BEFORE BRICK)	0	LF	0 LF	0 LF
Contreplaqué 4' X 8' J.A.S. POUR PIGNONS ET LUCARNES		Ples	Ples	Ples
Contreplaqué 4' X 8' FOR GABLE END & DORMER	0	Sht	0 Sht	0 Sht
TYVEK POUR PIGNONS ET LUCARNES		PL	PL	PL
TYVEK BUILDING PAPER FOR GABLE END & DORMER	0	LF	0 LF	0 LF
LATTES 1" X 3" X 16' POUR PIGNONS ET LUCARNES		Mcx	Mcx	Mcx
STRAPPING 1" X 3" X 16' FOR GABLE END & DORMER	0	Pcs	0 Pcs	0 Pcs
LATTES 1" X 3" X 12' POUR MURS (INTÉRIEURS)		Mcx	Mcx	Mcx
STRAPPING 1" X 3" X 12' FOR WALLS (INTERIOR)	160	Pcs	0 Pcs	160 Pcs
MOUSSE URÉTHANE		Mcx	Mcx	Mcx
POLYURETHANE	0	Pcs	0 Pcs	0 Pcs
MOUSSE 5/8" X 5/8" X25'		RL	RL	RL
COMPRESSED SEAL 5/8" X 5/8" X25'	0	RL	0 RL	0 RL

Figure 3.3 Extract from packing list (Modulex Inc., 1996)

arrive at appropriate times. This is ensured through the carefully designed packing arrangement of the container (Figure 3.4). The local access conditions to the building site and local transportation facilities must be known to avoid any additional problems.

Containers are designed to:

- save space (efficiency of space minimises the high cost of shipping);
- keep track of all pieces/components;
- to facilitate order of site construction through packing arrangement;[1]
- protect fragile components (i.e. reduce the risk of breakage);
- avoid omissions which are costly due to extra shipping time and money for extra transport. and that hold up construction schedule (e.g. if shipping is used to save costs. needless use of air freight to rush a missing/broken component is a wasteful additional cost).

3.2.7 Construction and Supervision

The on-site work involves the preparation or leveling of the building site. the excavation for the development of the infrastructure, pouring the concrete slabs, foundation walls and retaining walls, and executing the landscaping. The materials manufacturing company will most likely work, in conjunction with the local labour force, in a capacity focused on supervision. Having a trained expert on site, who is knowledgeable with respect to the local language and customs. is a necessary investment.

The final stages of the project include resolving problems which occur during construction (e.g. a panel that does not fit, omissions of required parts, lack of knowledge or unfamiliarity

[1] Modulex Inc., *Packing Instructions for Container* (Québec: Modulex Inc., 1996) 1.

of construction details by local workers). The long distances involved make communication of specific problems or questions costly and difficult: the use of a video phone through Internet could facilitate this procedure.

3.2.8 Additional Changes and Call-Backs

Additional changes, considered as extras, could be made by a client, who would be billed accordingly. The process of obtaining final approval from the client may also require additional work and is part of satisfying the demand for any call-backs or deficiencies which may have arisen during or after the completion of the project. The company is also bound to respect the guarantee that it gives to the client, and is therefore responsible for any servicing of problems which may arise in a certain time period after the client has approved the building.

3.3 Existing Export Structure

3.3.1 Specific Construction Details

Modulex Inc. manufactures prefabricated wall panels for their houses based on typical wood frame construction principles. The company has also developed and adopted additional details which enhance the building's performance with respect to energy efficiency and structural properties. These details are important when preparing working drawings for a house which is used for export purposes (Figure 3.5).

An analysis of these additional details was undertaken by the author and are described as follows, starting from the roof and including wall treatment and interior finishes. Air deflectors are placed in the roof and provide better ventilation, thereby reducing the risk of ice dams resulting from snow melting and freezing as ice. The trusses are spaced at twenty-four inch centres to increase the amount of insulation and decrease the potential points of thermal bridging. These trusses are factory built by the company and are designed to exceed snow load requirements. The stringer at the ridge line is beveled and jointed flush. The notched connection increases roof strength and simplifies assembly procedures. Strapping, using one-by-threes (one-inch-by-three-inch nominally sized wood framing members), provides an air space behind the exterior siding and is used in combination with an air barrier to provide adequate air flow behind the building envelope. The exterior sheathing is wafer-board with insulsheathing™ (a more water-resistant plywood) at the corners to provide better shear capacity and rigidity for the wall.[1]

The walls are constructed using two-by-sevens, which allow a full six inches of mineral wool insulation, leave room for an air space, and give greater strength to the wall. The windows are triple-glazed with a low-E glazing and are filled with argon gas for greater energy efficiency. One-by-three furring, installed on the interior of the wall and ceiling framing members, reduce the potential perforations of the vapour barrier during the installation of electrical boxes and interior gypsum wall finish. The furring also allows for easier passage of electrical wires behind the drywall without having to drill holes into the studs. Grooves are notched into the bottom (or sole) plates, the top and bottom of the header joists and the double top plates of the wall to allow for the insertion of a compression seal. This seal prevents air leakage and infiltration due to possible, yet typical, imperfections in the wood framing and connections. The two-by-five sill plate is anchored to the concrete foundation wall and is set with a spray foam sealant. The double two-by-X (where $X \in I$ and $4" \leq X \leq 14"$) headers of the window

[1] Modulex Inc., *Showcase of Homes and Cottages* (Québec: Modulex Inc., 1996), 2.

lintels are pre-installed with mineral wool insulation to reduce thermal heat loss. The same is done between two studs wherever this occurs, e.g. the double studs of the rough openings of doors and windows which accept the jambs. Lastly, an anti-torsion system braces the stud walls and increases their shear capacity.[1]

Many of these details are used for construction in the houses which are developed for export, in this case for a Japanese client, Mr. Kenyu Kogyo.[2] Japanese building standards require a very high level of structural stability, especially due to the high seismic activity in the region. Equally important is the notion of quality: typical residential construction in Japan is done using traditional wooden post and beam construction or masonry systems because of the perception that the applications of these material and their associated systems are more solid and will better withstand the forces of earthquakes than typical Canadian stick-frame construction, which uses much smaller wood members than the traditional post and beam method. This belief is often quite inaccurate, especially when considering the long-term success of many heavy timber and wood-frame designs of both the Japanese and North American contexts. Similarly, wood-frame houses have a reputation (once the initial stigma against them has been overcome) for being more comfortable than other residential construction systems and also have a higher resale value, in addition to having a lower life-cycle cost.

For the Japanese market, the company specifically focuses on a few details which enhance the building's structural performance (Figure 3.6). Steps taken to increase the rigidity of the wood-frame construction are the most important with regard to this issue. For example, the use of two-by-sevens in the stud wall system, as opposed to two-by-fours or two-by-sixes, are not only larger members, but are also manufactured from an exceedingly high-quality grade of lumber (called JAS lumber), which seems rather excessive for this application. The same results with respect to the structural performance could be achieved by using either regular

[1] Modulex Inc., *Showcase of Homes and Cottages* (Québec: Modulex Inc., 1996), 3.
[2] Modulex Inc., *Working Drawings: Matsuda House* (Québec: Modulex Inc., 1996) 1.

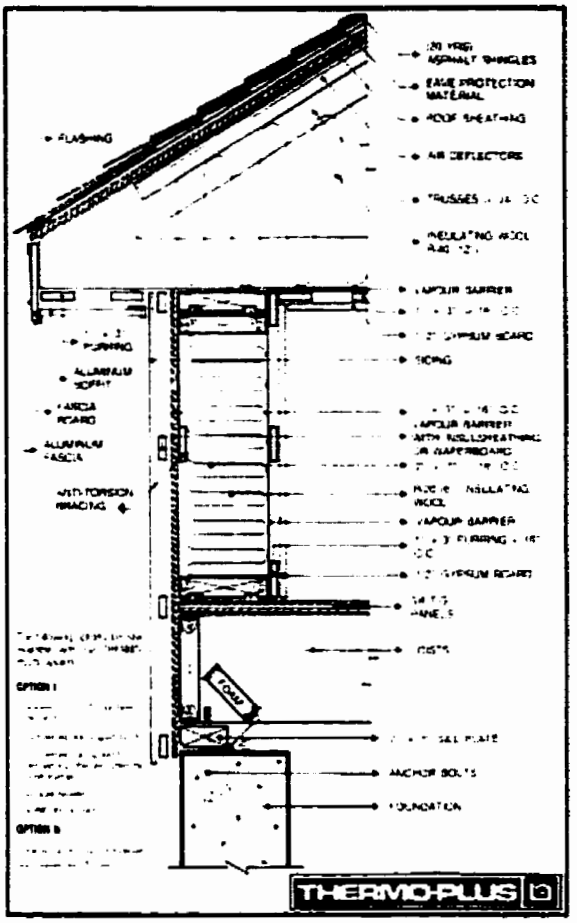


Figure 3.5 Wall section of prefabricated model home (Modulex Inc., 1997)

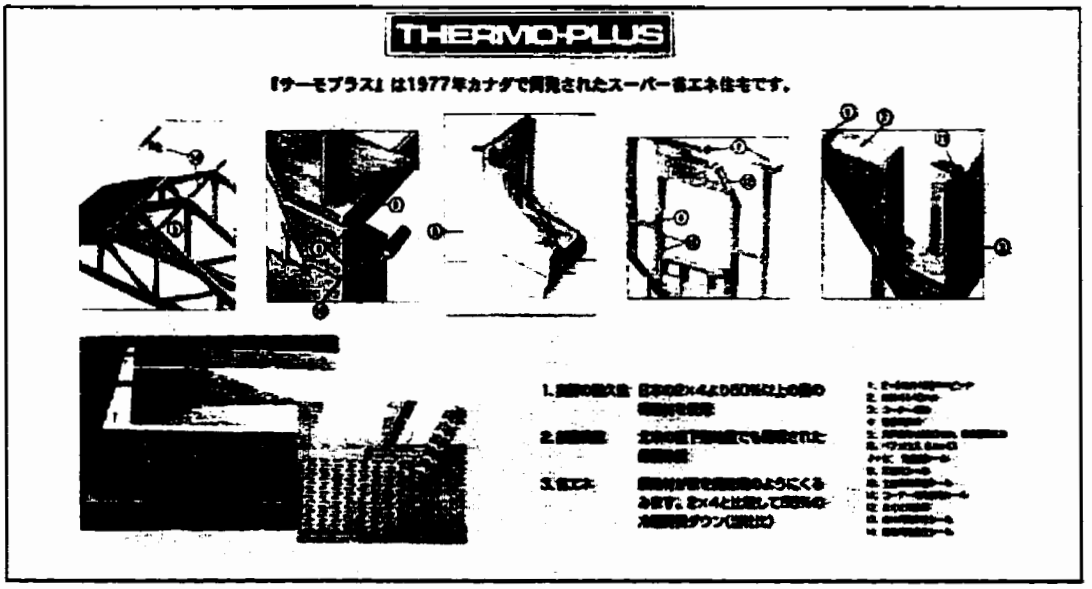


Figure 3.6 Specific construction details used for the Japanese market (Modulex Inc., 1997)

construction grade lumber (which is far less expensive) with closer spacing or in conjunction with more solid top and bottom plates of the stud wall. Similarly, the shear strength of the stud wall is increased using plywood at the corners (where the need for shear resistance is the greatest) in combination with wafer-boards as sheathing in the middle of the wall to help reduce the cost.[1]

3.3.2 Analysis of Plans and Working Drawings

The working drawings were also analysed by the author. They were drawn by Modulex Inc. for a house developed for Japanese clients. The use of two-inch-by-seven-inch JAS lumber for construction of stud walls ensures that the wood will contain no knots and the amount of warping and cupping of the members will be greatly reduced, thus leaving fewer areas of imperfections for the possibility of air infiltration through connections in the structure. This use of lumber is very expensive in relation to construction grade two-inch-by-four-inch or two-by-six-inch studs used in typical North American home construction. The exterior is clad with aluminium siding, with the exterior posts and handrails made using the same material (Figure 3.7). The pitched roofs are reminiscent of many suburban homes built on the domestic market.[2]

The kitchen has a very small amount of counter space but provides a large area for eating, with the possibility of having family meals on the floor of the adjoining dining room (Figure 3.8). The main bathroom is on the ground floor, away from the bedrooms: the bathtub is located in a different area and is separated with a door from the rest of the bathroom utilities. However, the bathroom only includes a vanity with sink and room for a hot water tank and laundry

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[1] Modulex Inc., *Brochure*: advertising Modulex homes to be developed in Yurigaoka and printed for the Japanese market (Québec: Modulex Inc., 1996) 2.

[2] Modulex Inc., *Working Drawings: Matsuda House* (Québec: Modulex Inc., 1996) Elevation.

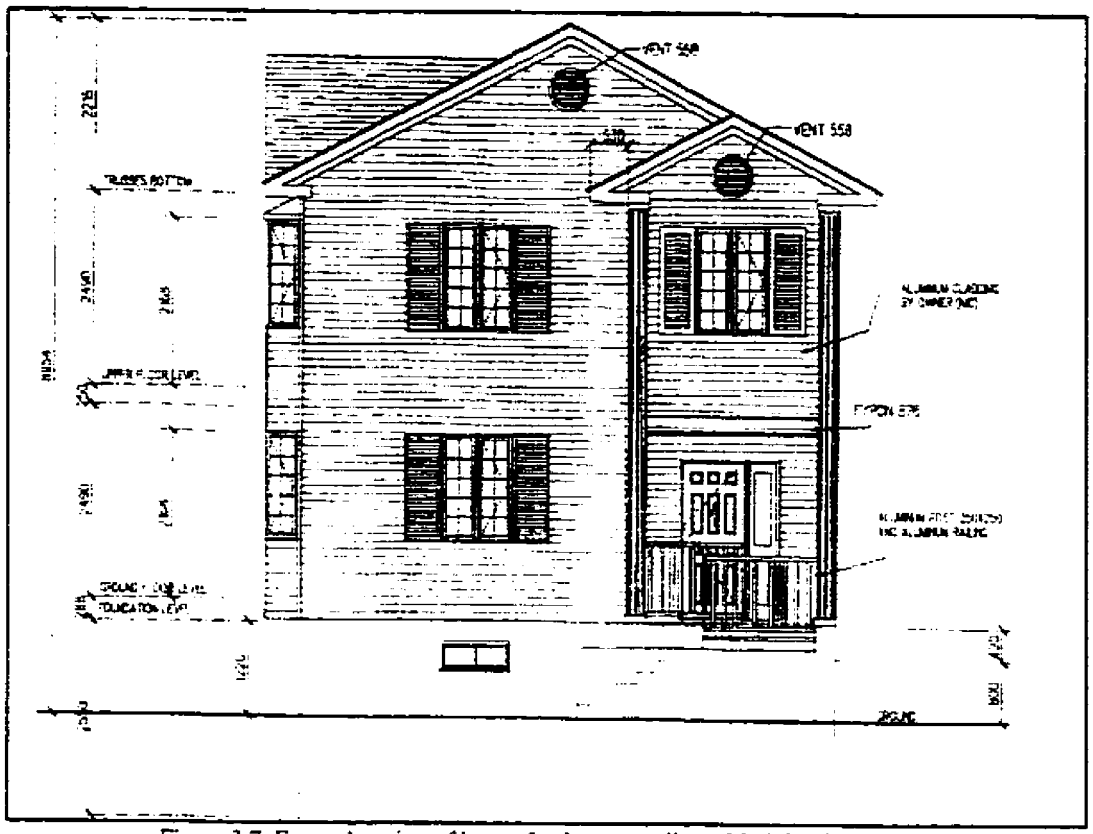


Figure 3.7 Front elevation of house for Japanese client (Modulex Inc., 1996)

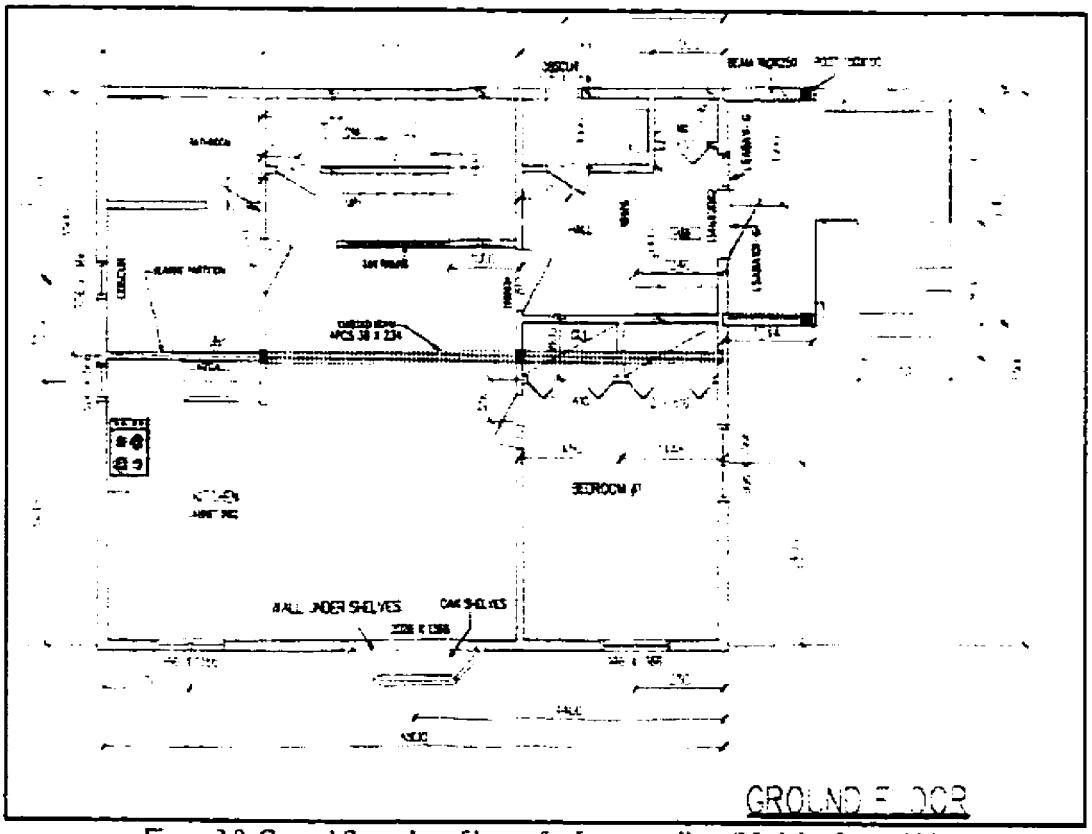


Figure 3.8 Ground floor plan of house for Japanese client (Modulex Inc., 1996)

equipment without the presence of a toilet. The toilet is located in a separate room off the entry hall and contains a storage cabinet. The entry hall is separated from the rest of the ground floor by a door, creating an isolated entrance space.[1]

Upstairs, among the bedrooms, is a second toilet in a room by itself (i.e. without a sink) (Figure 3.9). This upper toilet is stacked vertically above the bathroom of the ground floor which simplifies the passage of services (hot and cold water supply and waste water and solid drainage) to the floor above and is a common practise in domestic housing units. The bedrooms are all located in the upstairs area and thus is more private, similar to North American zoning within the home.[2] The construction details are typical wood framing details, commonly used throughout the North American home building industry.[3] The structure and purpose of the joints, connections and details of North American wood-frame construction, are identical to those used in traditional Japanese joinery, but appear different only due to ornamentation. This is not a direct result of the response to cultural influences but merely the only way to successfully deal with the physical properties of wood.

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[1] Modulex Inc., *Working Drawings: Matsuda House* (Québec: Modulex Inc., 1996) Ground Floor Plan.

[2] Ibid., Upper Floor Plan.

[3] Ibid., Details.

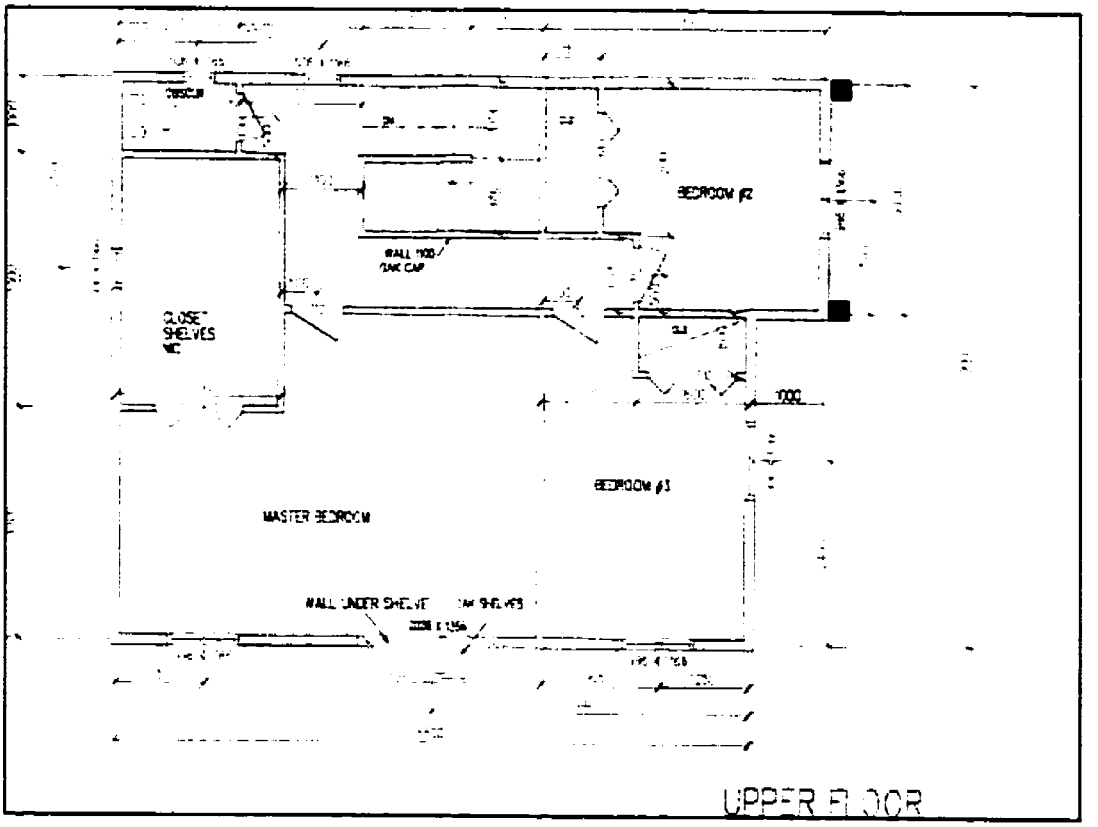


Figure 3.9 Second floor plan of house for Japanese client (Modulex Inc..1996)

CHAPTER FOUR: THE USE OF COMPUTERS AND THE INTERNET AS A BUSINESS AND COMMUNICATION TOOL IN HOUSING

4.1 Background

4.1.1 Potential of the Internet

With the globalisation of world economies, the efficient transfer of information is essential. Technology has facilitated communication between different regions of the world using various modes and media, ranging from fast long-distance transportation to voice and video communication systems. The increased necessity for carrying out all these functions at a constantly accelerating pace has required the development of high-speed electronic communications based on faster personal computers and using new and existing telecommunications networks to transfer this data and new data types.

Through the use of personal computers, the potential exists for people to communicate with one another through written, verbal and visual means. These revolutionary methods allow people to interact and exchange information regardless of physical and political obstacles such as distance and culture. The implications of such communication can be applied to professional areas in business and trade. In the past, trade has been limited more to local markets due to the high cost of transportation and the difficulties of setting up markets in foreign places. Although the use of highly developed communication systems does little to influence factors such as transportation costs, they allow companies to tap into the global market by increasing their exposure to different cultures and their business practises.

The use of the World Wide Web can also give a company an international presence through the development of a Website, with an electronic catalogue available on-line (Figures 4.1, 4.2 and 4.3). Another useful application of the Web and its potential is the ability to communicate cheaply and quickly over long distances. Unfortunately, many networks are unreliable and can cause systems to crash: important and confidential information could be lost or appear in the wrong place. Search engines, used to find information on the Web, are still weak. At best many are only capable of searching through 39% of the information available, with a large portion of the search results linking to inactive or dead sites.[1] The traditional ways to search for information, such as using printed catalogues or phoning companies to obtain Website addresses, remain reliable.

4.1.2 Some Useful Definitions

Internet

• a digital communication network connecting other smaller networks across the globe, using a standard protocol to transfer data (Table 4.1).

WWW (World Wide Web)

• an extensive network of documents that are linked together, whose working system is defined by a set of protocols (Table 4.2).

TCP/IP (Transmission Control Protocol/Internet Protocol)

• a standardised set of rules for computer communication which allows different types of computers and networks connected to the Internet to communicate.

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[1] *http://www.news.com/News/Item.*

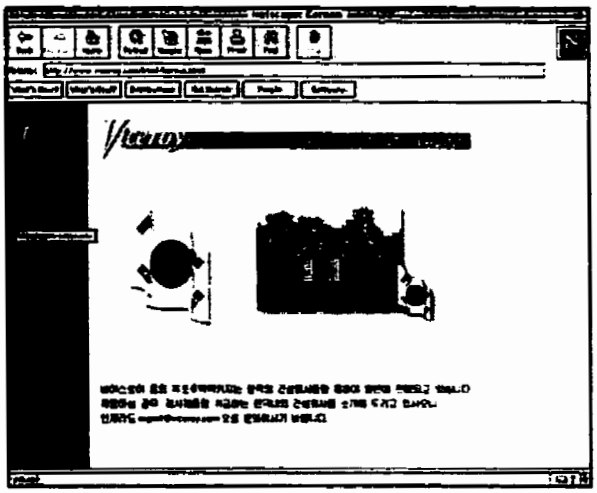


Figure 4.1 Viceroy's prefabricated homes for Korea (http://www.viceroy.com/html/korean.html, 1997)

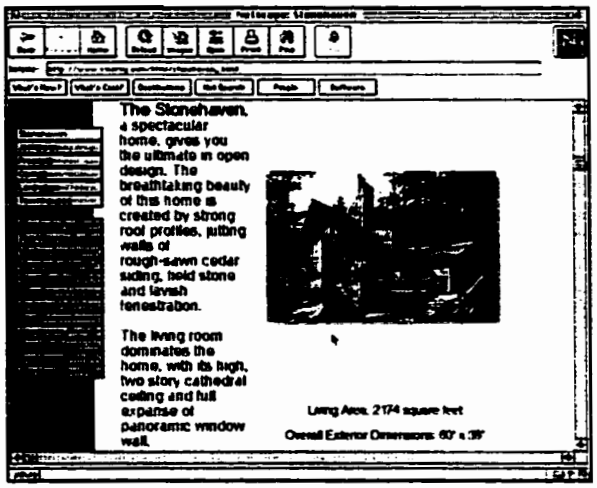


Figure 4.2 A Viceroy model home (http://www.viceroy.com/html/stonehaven_.html, 1997)

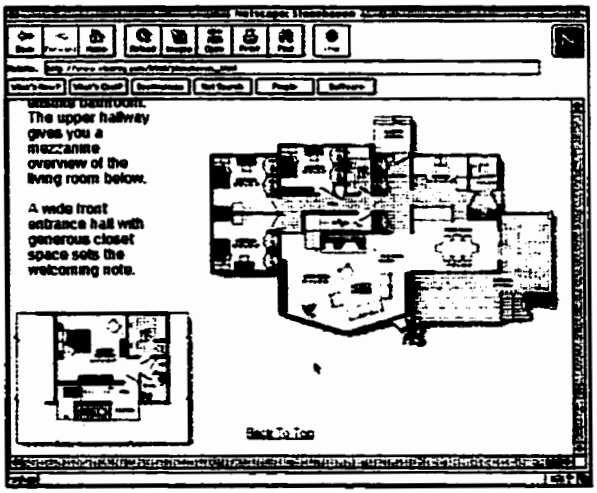


Figure 4.3 Floor plans of a Viceroy home (http://www.viceroy.com/html/stonehaven_.html, 1997)

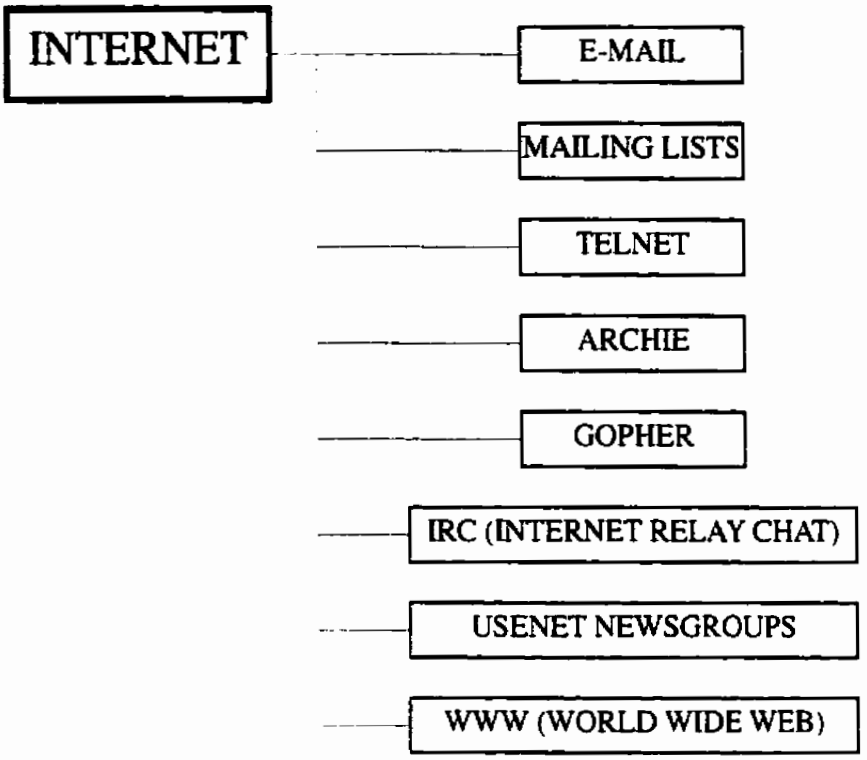


Table 4.1 Components of the Internet (Ellsworth, 96)

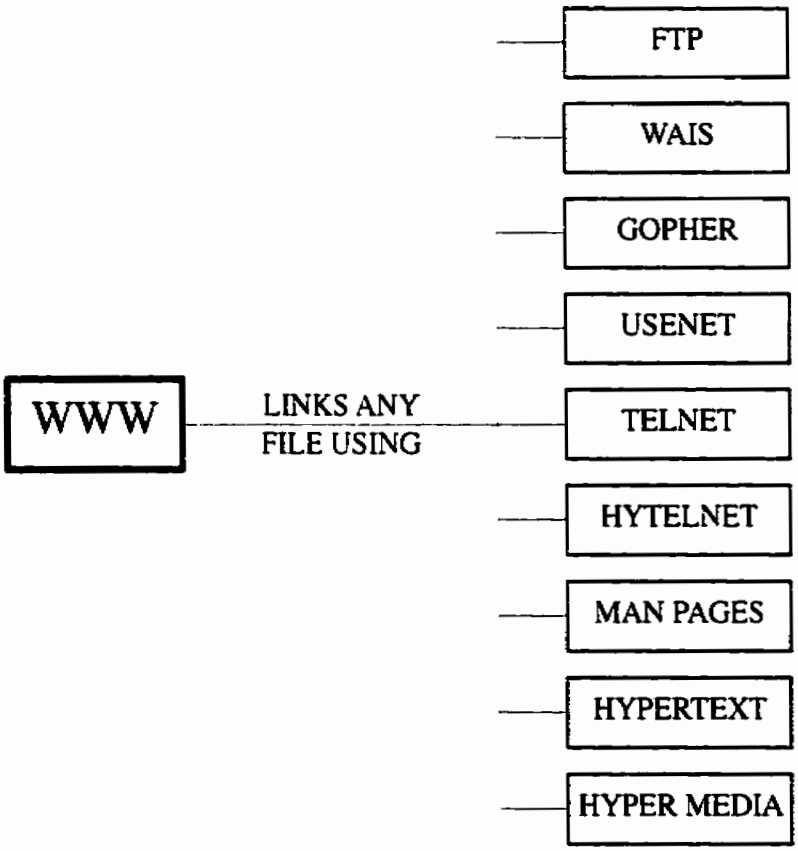


Table 4.2 Document types available on the World Wide Web (Ellsworth, 96)

HTML (HyperText Markup Language)

• a language with a standardised set of commands and syntax used for encoding text files with formatting and document linking information, for use on the WWW and viewed using a Web browser.

HTTP (HyperText Transfer Protocol)

• a standardised set of rules for transferring and processing HTML and other types of documents on networks.

Web Browser

• software applications used for retrieving and viewing HTML documents (e.g. Netscape Communicator, Microsoft Internet Explorer and Ascii Lynx).

URL (Uniform Resource Locator)

• an addressing system that uniquely names files in the Internet: includes a protocol name (e.g. gopher, ftp or http), a site name, a sub-directory path and a filename.

FTP (File Transfer Protocol)

• a system used to transfer copies of a file from one computer on the Internet to another.

Gopher

• a tool for finding and retrieving files of all kinds throughout the Internet.

E-mail

• private messages delivered via networks to another individual's E-mail account.

HyperText

• text in an HTML document that is coded to provide a (hyper)link to other locations within the document or to other documents.

Telnet

• a system that allows access to remote computers on the Internet.

Server

• a server programme maintains a database and provides information to client programmes through the network when requested.

IP address

• groups of numbers used by Internet routers to direct packets of information to the correct sites.

VRML

• language for describing multi-participant interactive simulations.

4.1.3 The Internet Environment

The Internet is still in a developmental stage when considering many practical applications. However, the tremendous growth of this network has attracted many businesses and institutions to this technology. One study claims that the Internet is growing at a rate which doubles its size every nine months.[1] In order to better understand the present form of the Internet, it is necessary to study its origins. This also provides a more complete knowledge of

[1] Ellsworth, The Internet Business Book, xxi.

the rules and etiquette of the Internet and its layers of technical protocols. Although the Internet is changing rapidly, it is still fundamentally based on its original foundation.

The Internet evolved from a network set up by the United States Department of Defense (DOD) in the early 1970s. This network was developed by a specific body of the DOD called the Advanced Research Projects Agency (ARPA) in order to connect a number of military and research sites. Named the ARPAnet, this communications system was also an experiment in how to build reliable networks. The research resulted in the development of a protocol allowing dissimilar computers and computer systems to communicate over the same network, and a method of transferring data in packets (with their own destination addresses) through multiple paths.[1] The success of these research projects resulted in other networks using the same standards, known today as TCP/IP (Transmission Control Protocol/Internet Protocol), which is the mechanism that transmits information across the different networks of the Internet.[2]

In the late 1980s, the National Science Foundation (NSF) expanded its own NSFNET using ARPAnet technologies and a high-speed backbone linkage. This network allowed university campuses and research centres access to NSF's supercomputers. Soon afterwards, the network began to be used for E-mail and the transfer of data and information files between sites. This network, the Internet, grew with the inclusion of commercial interests and private individuals who could not obtain access through government or academic institutions. Providing high-speed links, the Internet is funded by the NSF and is managed by Advanced Network System (ANS).[3]

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[1] Ellsworth, The Internet Business Book, 3.
[2] Melanie Hills, Intranet Business Strategies, 11.
[3] Ellsworth, The Internet Business Book, 4.

In 1989, the World Wide Web (WWW) was created by Tim Berners-Lee at the European Laboratory for Particle Physics (CERN). The Web uses HyperText to link information; HyperText allows users to select a highlighted button (either text or graphics) which links to that information regardless of where it is stored on the network. Home pages form the basis of the Web and provide starting points for gathering information. In general, Web pages use HyperText links to provide access to information in the form of text, graphics, sound and video.[1]

In 1993, Marc Andreessen, with the help of fellow students, created Mosaic, the first popular graphic Web browser, at the University of Illinois' National Centre for Supercomputing Applications. Due to its graphic user interface, Mosaic made the Web easy to use, and since it was possible to download it from the Internet at no cost, access to the Web became inexpensive.[2]

4.1.4 The Requirements for Getting On-Line

Individuals do not sign up for an Internet account directly, but obtain an account on an organisation's host computer that is connected to the Internet in one of a number of ways. The organisation may be providing this service to its customers for profit or, as in the case of many academic institutions, free of charge. An individual can be connected to the organisation's computer either by having a hard-wired link from the user's network card to the server (or via one of its switches or hubs) or by using a phone line in conjunction with a personal computer and a modem.[3]

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[1] Melanie Hills, Intranet Business Strategies, 5.
[2] Ibid., 6.
[3] Ellsworth, The Internet Business Book, 6.

4.1.5 The Available Audience

The Internet is a rapidly increasing medium whose size is directly related not only to the number of users accessing the Web, but also to the volume of information available for use in this medium (i.e. the number of Web pages and Websites). There are over 36 million host computers connected to the World Wide Web (Table 4.3), and approximately 320 million Web pages on the Internet (Table 4.4).[1]

In the international and North American context, the United States remains the leader in Internet usage and development, including the number of Internet users and businesses on-line, and the number of home PCs in use (Tables 4.5 and 4.6). However, many other countries, including Canada, have a higher Internet usage in relation to their total populations, and a larger percentage of people in these countries have access to computers with Internet capabilities (Table 4.7). In addition, Canada's network backbone is one of the most highly developed in the world – the CA*net II links the country from the Pacific to Atlantic coasts with the OC 12, one of the fastest, optically based high-speed networks.[2]

English is the predominant language used on the Web, with 68% of Internet users communicating and exchanging information in English (Table 4.8).[3] However, the use of Japanese, German and Chinese is on the rise, and these languages will remain an important factor in international trade and communication, eventually reducing English's majority usage to less than 50%.

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[1] State of the Internet (www.pegasusri.com).
[2] CANARIE Inc., 3rd Annual Advanced Network Workshop.
[3] Demographics (www.pegasusri.com).

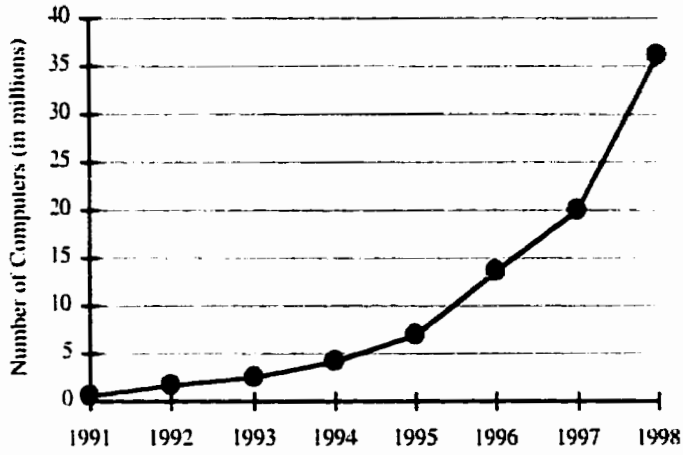


Table 4.3 Number of computers, or hosts, linked to the Internet (Network Wizards, 1998)

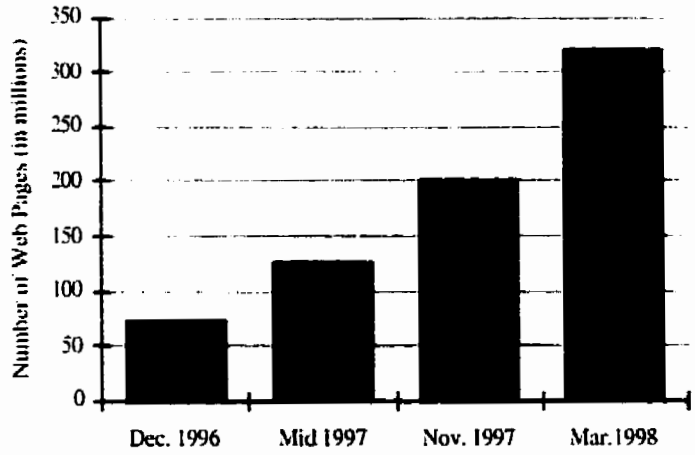


Table 4.4 Number of Web pages on the Internet (IDC, AltaVista, NEC, 1998)

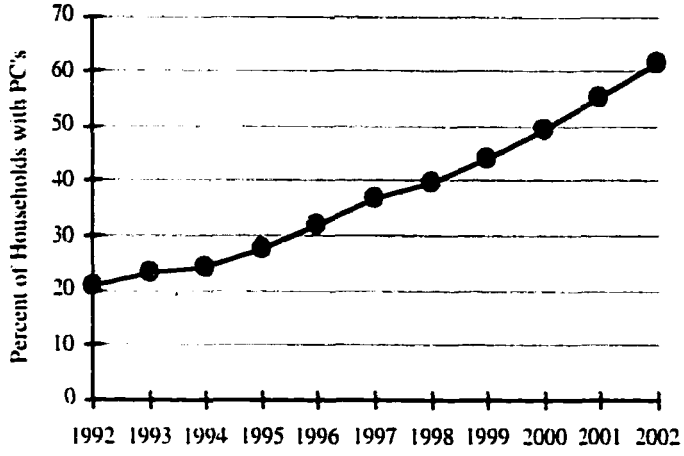


Table 4.5 Percent of US households with PCs (NTIA/US Census Bureau, 1999)

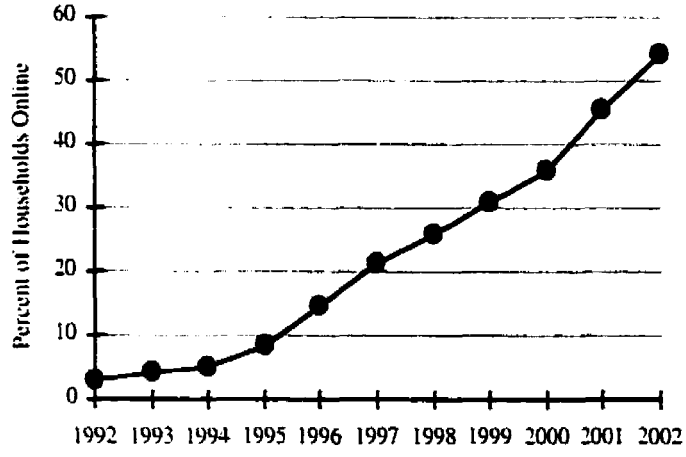


Table 4.6 Percent of US households on-line (Pegasus RI, 1999)

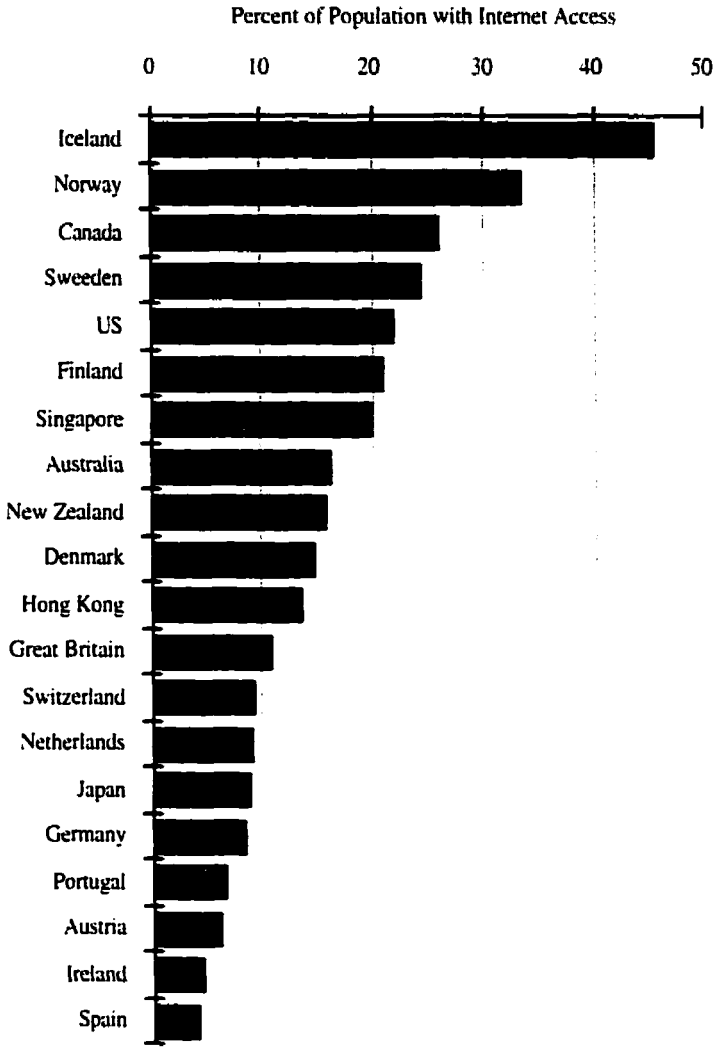


Table 4.7 Top countries in Internet usage (Pegasus RI. 1998)

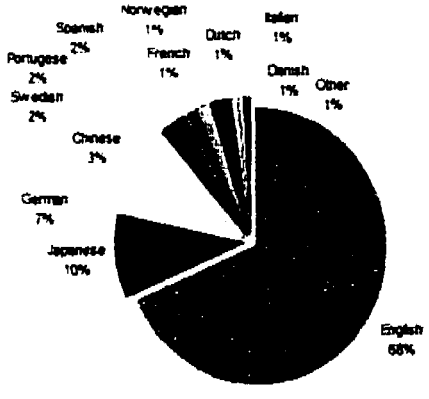


Table 4.8 Languages used on the Internet (Pegasus RI. 1997)

4.1.6 Levels of Interactivity

The level of interactivity in a Website depends on what the site is intended to do. If, for example, the Website is designed as a simple showcase of products, the level of interactivity is low, since users only get information about specific products or product lines. But if the site is also intended to allow users to buy products on-line, the level of interactivity must be high enough to complete a full business transaction: that is, to have a full ordering process, a link to inventory and shipping information and, in some cases, on-line credit card verification.

Some sites also allow users to try out computer products, like CD-ROMs, databases and software applications. The Website then becomes a platform to learn more about a specific product. These try-outs are mainly on-line simulations of the real products. Some software developers also integrate a Website as a complement to their product: for example, an updated database or additional features like Web content browsing through the CD-ROM (software).

4.1.7 The Speed of Transmission

The speed of transmission, or bandwidth, is the rate at which data is transmitted to the end user. The bandwidth is usually very high between servers and very low between modem users and servers. Bandwidth is key in business data transmission, because a large amount of data is involved. Servers often work in parallel and need to be up-to-date in real time. Bandwidth becomes a major concern when transferring large images (like house plans drawn in CAD software) or multimedia content such as sound and video. These types of data use large computer files that are very slow to transfer. Some files are compressed before the transfer process. Compression often allows users to drastically reduce the size of the file, from less than 2:1, to 16:1 in the best cases. Compressing files has its downside, since it requires the

end user to decompress the data received. This requires that the user has the expertise and software to do so.[1]

4.1.8 Technical Support

Generally speaking, end users are only familiar with a small fraction of their computer's workings, which is why technical support is crucial. Websites are good declinations of value-added technical support. This kind of on-line support is usually intended for more advanced users who already know how to use the Internet as a tool.

4.1.9 Updating Information

In the Internet's rapidly growing world of information, updating content is key. Many Websites are not maintained, and their information is outdated or completely obsolete. Information on business Websites must be published in real time so that customers or partners can access it quickly and reliably. Most Websites are built in a two-fold fashion: one part containing static content about the company (i.e. mission, areas of work, locations) and a more dynamic part comprised of breaking news about the business and press releases. Updating the content in a Website requires little knowledge about programming, and many user-friendly tools exist to help users add, modify or delete content in Web pages. Many industry standards in word processing software include sections inside the programme which allow users to create and edit Web pages for display on the Internet.[2]

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[1] Personal interview with Chrystian Guy, Web specialist.
[2] Ibid.

4.2 Marketing Using the Internet

4.2.1 "E-Commerce"

"E-commerce" is a term applied when companies engage in the business of Internet-based sales; this includes companies selling merchandise through electronic catalogues on the Web, or businesses performing everyday transactions such as ordering supplies or selling stock to their distributors. E-commerce is one of the fastest-growing sectors of the economy, with an annual growth rate of approximately 100% (Table 4.9). Although it still represents less than 0.5% of the total retail sales market (Table 4.10), E-commerce is expected to increase its market share steadily, especially in catalogue-based consumer sales.[1] Transactions between business, however, comprise the majority of electronic commerce activity. Business-to-business E-commerce accounts for 75% of all the Internet financial transactions and is expected to increase even faster than consumer retail sales on the Web.[2]

4.2.2 Effective Marketing Strategy and Exposure

A company interested in exploiting the Internet for business uses must determine whether it wants to use its Website in an active or passive role. The Internet can be used to assist in the marketing of products and to communicate with clients and suppliers on customised Websites (active), or simply to allow users to browse through a catalogue of products or advertising (passive). Regardless of how it does business, a company may require an Intranet setup to facilitate communication within its own ranks. Many companies are also motivated by the fear of falling behind the times by not having a presence on the Internet, even though no one can

[1] E-Commerce (www.pegasusri.com).
[2] E-Commerce; Business to Business (www.pegasusri.com).

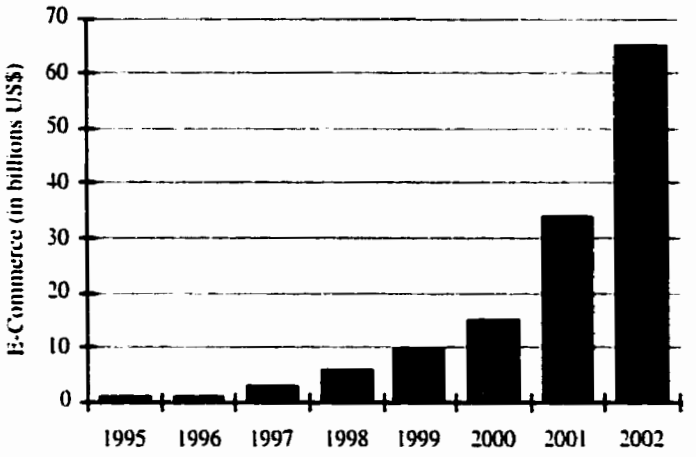


Table 4.9 E-commerce: business to consumer sales (Pegasus RI, 1999)

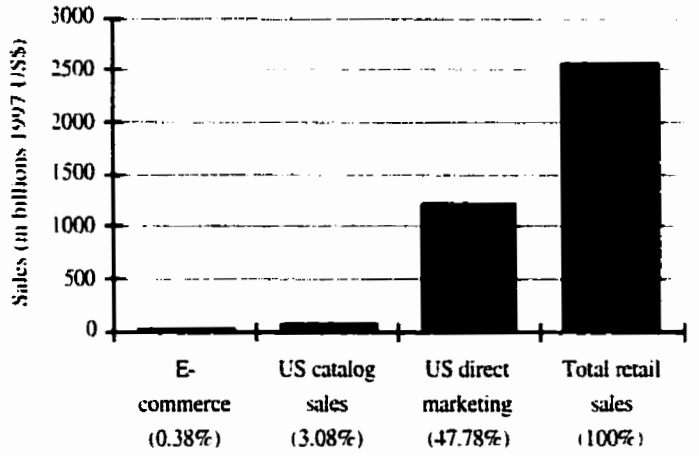


Table 4.10 E-commerce sales in relation to total retail sales (Pegasus RI, 1999)

predict whether or not the Internet will prove to be a tool necessary for all companies in the coming years.[1]

Once a company has decided to go "on-line", its requirements, in terms of the use and future use/expansion of its Website, must be determined through consultation with a Web expert experienced in dealing with companies of differing backgrounds. This consultant must prescribe the correct approach based on the company's business strategy and targeted audience, (client base). In addition, the consultant must advise the company on purchasing the appropriate hardware/software and be available for future troubleshooting and updating of information.

4.2.3 Website Design

Website design should reflect the firm. It is mandatory that the corporate image of the firm is integrated in the Website design for branding matters. Websites should be constructed in an ergonomic fashion, so that information is easily accessible and navigation is fluid. It is important that users are able to find what they are looking for while having a good feeling about the Website. Using attractive graphics to support the content helps maintain user interest.

Navigation within a Website is a procedure that should be carefully planned; Websites that are difficult to browse through or make it difficult to return main starting points can be frustrating and a waste of users' time. Similarly, the graphic content of the site, while being interesting and appealing, must maintain a level of clarity and legibility. For instance, text should not be placed on a graphic background of a similar colour or a distracting pattern that would make the text illegible. Another example of good Web page design relates to the display of images; if a

[1] Personal interview with Chrystian Guy.

large number of images is available for viewing, an index showing a thumbnail version of the full image should be provide rather than displaying a Web page with each image given in its full size format. This saves time loading the page and also provides a summary of the images.

4.3 Security of Confidential Information

4.3.1 Access to Information

A Website is a public information publishing tool. Even in Intranet mode, where users need to register or be part of a private group to access information, the underlying structure is one of public content display. That is why precautions need to be taken when putting information on-line. For example, secret information about products or business plans should not be put on a Website. Also, for security matters, on-line databases should be replications of the real databases: a company might want to display the content of its database, but would want information to be deleted or tampered with by an 'info-terrorist' or a hacker. In a corporate Website, only the Web master (or design team) should be able to publish content, a precaution that prevents unauthorized display of erratic or false information about the company and/or its products.

Logging in can provide limited access to some content to a specific group of users. This procedure requests that a user enter their user name and a password before they can go any further. The most common piracy cases come from social engineering, whereby unauthorized users gain access to passwords through unscrupulous means such as bribery, looking over the shoulder of co-workers, or the "I forgot my password, please give me yours" trick.

But for public information, the Web is a great vehicle for publishing content. And since it uses the same technology as common software (a computer), it is an efficient complement to any piece of software. For example, the protocol for accessing information is rather simple and easy to integrate in a CD-ROM software title. Most Web content can be resumed in text form and can be browsed with a simple and easily distributed software, since most Web browsers are free.[1]

4.3.2 Confidentiality of Client's and Manufacturer's Correspondence

Data about users, clients and partners must be recorded in protected databases, which should not be accessible via an ordinary http protocol, which is designed for the transmission of public information. A corporate Web master should instead use the http-s protocol, which stands for "secure" http. This protocol uses data encryption to prevent unauthorized access to information. Encryption is a process that scrambles data before it is sent, and an encryption key is needed by the end user to decrypt (unscramble) the data. It is also recommended that E-mails be encrypted when they contain confidential information. Contract documents rarely need to be displayed on-line, except in an Intranet environment, so they should also be protected by a secure http.[2]

4.3.3 Methods of Payment

On-line payment can be processed in many ways. The most primitive method is to send an order form via E-mail or a Web page with the information concerning the transaction. This process is very similar to, but less secure than, fax orders since the data can reside on Web

[1] Personal interview with Chrystian Guy.
[2] Ibid.

servers or mail servers for some time before it is delivered to the addressee. One of the most common ways of processing on-line transactions is through a Web-driven order form with data encryption, using Secure Socket Layer (SSL). This method allows users to order the products they want to buy and provides the seller with the customer's credit card information.

Another option is to process the credit card transaction on-line while the ordering process is taking place, made possible through on-line payment software. In this method, the user's credit card is automatically charged for the transaction. Some business-to-business models also use tokens to make on-line transactions, allowing customers to make numerous purchases on account. The tokens are tallied on a regular basis and a billing process is then initiated through standard mail.[1]

4.4 Example of a Web Search

4.4.1 Introduction

The following search was undertaken to explore what sort of presence housing manufacturers have on the Internet. When searching the Internet, it is important to develop a methodology, which can be seen as simply a structured order while navigating within the Web and other habits, allowing for a better grasp of the material that needs to be examined and retrieved. An example of a Web search methodology is the systematic compilation of site addresses visited. Although Web browsers have bookmark features, it is equally simple to cut and paste useful addresses into categories laid out in a text application that can be kept running in parallel with the browser application. This allows the user to produce a hard copy of Web pages that can be

[1] Personal interview with Chrystian Guy.

sorted and used as an index for later use, or to distribute to other users interested in the same area of study.

4.4.2 Lists of Websites

The purpose of the search was to compile a comprehensive, if not complete, list of prefabricated housing manufacturers and retailers in the province of Québec. The list was expanded to include the rest of Canada and the United States to allow a better understanding of the results found and to give a relative impression for local companies in the North American context.

The search was initiated by using a commercial search engine. Many variations of keywords and word combinations were used over the course of the research. Specific Web search syntax and protocol were followed, such as using quotation marks and the plus symbol in combination with keywords to maximise the search efficiency, by removing as many unnecessary hits (Websites containing a match of search topics or keywords) as possible. Browsing through irrelevant search results wastes time and creates for work for the user.

Table 4.11 shows a list of manufactured housing companies whose Internet home pages were found on the Web. The information was found with varying degrees of ease and rapidity – some companies were found through a simple investigation using a commercial search engine (e.g. AltaVista™ or Lycos™) and through links from Websites belonging to one of the many prefabricated housing associations or regional organizations involved with manufactured housing. Other companies were harder to find, requiring specific searches with the addition of the location to the search keywords, while others could not be found even when the company's name was included in the search description.

WEBSITE ADDRESS	COMPANY NAME	LOCATION
http://www.alouettehomes.com	**(Les Maisons) Alouette Homes**	**QC**
http://www.2ianet.com/amhi	Anderson Manufactured Homes	NM
http://www.arontec.com	**Arontec Inc.**	**QC**
http://www.astrohomes.com	Astro Homes	PA
http://www.bentonhomes.com	Benton Homes Inc.	MO
http://www.boweshomes.com	Bowes Manufactured Housing Inc.	**MB**
http://www.brilliant-homes.com	Brilliant Homes	TX
http://www.britco.com	Britco Factory Built Buildings	**BC**
http://www.buccaneerhomes.com	Buccaneer Homes	AL
http://www.burlingtonhomes.com	Burlington Homes of Maine	ME
http://www.buy-ritehomes.com	Buy-Rite Homes	WA
http://www.cambonihomes.com	Camboni's Manufactured Homes	IL
http://www.symweb.com/cardinal	Cardinal Homes	VA
http://www.cavalier-homes.com	Cavalier Homes of Alabama	AL
http://www.castle-homes.com	Castle Homes	CO
http://www.clayton.net	Clayton Homes, Inc.	TN
http://www.cmvilleray.com	**Club Maisons Villeray**	**QC**
http://www.directory.reddeer.net/chiles.htm	Chiles Homes Ltd.	**AB**
http://www.crestlinehomes.com	Crestline Homes, Inc.	NC
http://www.emeraldlifestyle.com	Emerald Lifestyle Homes	OR
http://www.factoryhomes.com	Factory Homes	OR
http://www.thegrid.net/yreka/Fairlane.html	Fairlane Manufactured Homes	CA
http://www.lasvegasfleetwood.com	Fleetwood Home Center	NV
http://www.fourseasonshousing.com	Four Seasons Housing	IN
http://www.fuquahomes.com	Fuqua Homes	OR
http://www.goldmedalhomes.com	Gold Medal Homes	NC
http://www.goldenvilla.com	Golden Villa Homes	CO
http://www.guildcrest.com	Guildcrest Homes	**ON**
http://www.harthousing.com	Hart Housing Group	USA
http://www.heartlandtexas.com	Heartland Homes	TX
http://www.vtinet.com/heritage	Heritage Homes of the Valley	CO
http://www.highdeserthomes.com	High Desert Homes	OR
http://www.highmountain.com	High Mountain Homes	OR
http://www.willerby.com	Holiday Homes	UK

Table 4.11 List of manufactured housing companies on the Internet (Canadian companies in bold)

WEBSITE ADDRESS	COMPANY NAME	LOCATION
http://www.hhs.net/homes	Homes by Sturge	PA
http://www.homescanada.net	Homes Canada Inc.	**AB**
http://www.homesofmerit.com	Homes of Merit	FL
http://www.hmstead.com	Homestead Homes	GA
http://www.modularcenter.com/homeworks	Homeworks Modular Homes	NY
http://www.hortonhomes.com	Horton Homes	GA
http://www.ind.bonneville.qc.cq	**Les Industries Bonneville**	**QC**
http://www.thekarstenco.com	The Karsten Company	CA
http://www.kenthomes.com	Kent Homes	NB
http://www.kitmfg.com	KIT Manufacturing	ID
http://www.libertyhomesinc.com	Liberty Homes, Inc.	IN
http://www.maisonsbondu.com	**Les Maisons de pièces Bondu inc.**	**QC**
http://www.hestia.net	**Maisons Hestia**	**QC**
http://www.marcoux.qc.cq	**Maisons Marcoux Inc.**	**QC**
http://www.multigon.qc.ca	**Maisons Multigon**	**QC**
http://www.manufacturedhomesofmi.co	Manufactured Homes of Michigan	MI
http://www.mlhomes.nb.ca	Maple Leaf Homes Inc.	**NB**
http://www.maplehomes.com	Maple Homes Canada	**BC**
http://www.modularconnection.com	The Modular Network, Inc.	USA
http://www.modulex-international.com	**Modulex Inc.**	**QC**
http://www.moduline.com	Moduline Industries	**CAN**
http://www.busdir.com/mthou	M.T. Housing, Inc.	WA
http://www.nevadamobilehomes.com	Neavada Mobile Homes	NV
http://www.nelson-homes.com	Nelson Homes	**AB**
http://www.normarkhomes.com	Normark Homes	BC
http://www.normerica.com	Normerica Building Systems	**ON**
http://www.nerealty.com/modular.htm	Northeast County Homes	CT, MA
http://www.oakwoodhomes.com	Oakwood Homes Corporation	NC
http://www.palmharbor.com	Paml Harbor Homes	TX
http://www.parkavehomes.qpg.com	Park Avenue Homes	WA
http://www.patriothomes.com	Patriot Homes, Inc.	IN
http://www.qmh.com	Quality Manufactured Homes	**BC**
http://www.qualityhiomes.on.ca	Quality Manufactured Homes Ltd.	**ON**
http://www.realenghomes.com	Real Engineered Homes	**BC**

Table 4.11 (Cont.) List of manufactured housing companies on the Internet (Canadian companies in bold)

WEBSITE ADDRESS	COMPANY NAME	LOCATION
http://www.redmanhomes-nw.com	Redman Homes	OR
http://www.rochesterhomesinc.com	Rochester Homes, Inc.	IN
http://www.wave.park.wy.us/~rushmore	Rushmore Homes	WY
http://www.schulthomes.com	Schult Homes Corporation	IN
http://www.showplacehomes.com	Showplace Homes	OR
http://www.silvercrest.com	Silvercrest Western Homes Corporation	CA
http://www.westernhomes.com	Silvercrest Western Homes Corporation	CA
http://www.swmanufacturedhomes.com	South West Manufactured Homes	AZ
http://www.hhs.net/houmes/systemsmain.htm	System Homes Inc.	WV
http://www.seahawkhomes.com	Sea Hawk Homes	**ON**
http://www.skylinehomes.com	Skyline Manufactured Housing	IN
http://www.srihomes.com	SRI Homes, Inc.	**BC**
http://www.eeehomes.com	Triple E Homes	**AB**
http://www.valleyridgehomes.bc.ca	Valley Ridge Manufactured Home Centre	**BC**
http://www.viceroy.com	Viceroy	**ON**
http://www.woodhillestatesinc.com	Woodhill Estates, Inc.	NY
http://www.symweb.com/yellow.html	YellowHammer Homes	AK

Table 4.11 (Cont.) List of manufactured housing companies on the Internet (Canadian companies in bold)

4.4.3 Description of the Results of a Specific Search

The first step involved using a search engine available on the WWW called AltaVista™ and entering the words *manufactured housing*. The partial results of the search are shown in Figure 4.4. A total of 139,816 documents were found, many of which would prove to be of little relevance to the topic if all these documents were visited. At the time of research, the search engine happened to be displaying an advertisement for amazon.com, which is an electronic bookstore that is one of the most wealthy companies in the United States in terms of its stock value. A list of titles on manufactured housing was obtained using this service (Figure 4.5). Again, many of the titles listed were only tangentially related to the search topic, and many publications that are normally available from local bookstores, such as books by home-manufacturing organisations, were notably absent.

AltaVista™'s search engine allows the user to refine a search to include only relevant subject headings. In this case, the following subjects were selected to narrow the search: 'manufactured,' 'residential' and 'exports', resulting in a list of 1,277 documents. One document was selected (Figure 4.6), and by using the translation service offered by the AltaVista™ search engine, a Spanish version of the same document was immediately retrieved (Figure 4.7). This has tremendous implications and usefulness in the global context, considering that the WWW is still predominantly an English-speaking domain used by people around the world. In this case, many of the HyperLink buttons and titles remain in English as they are HyperText graphic links and not pure text (i.e. the files are comprised of images rather than text).

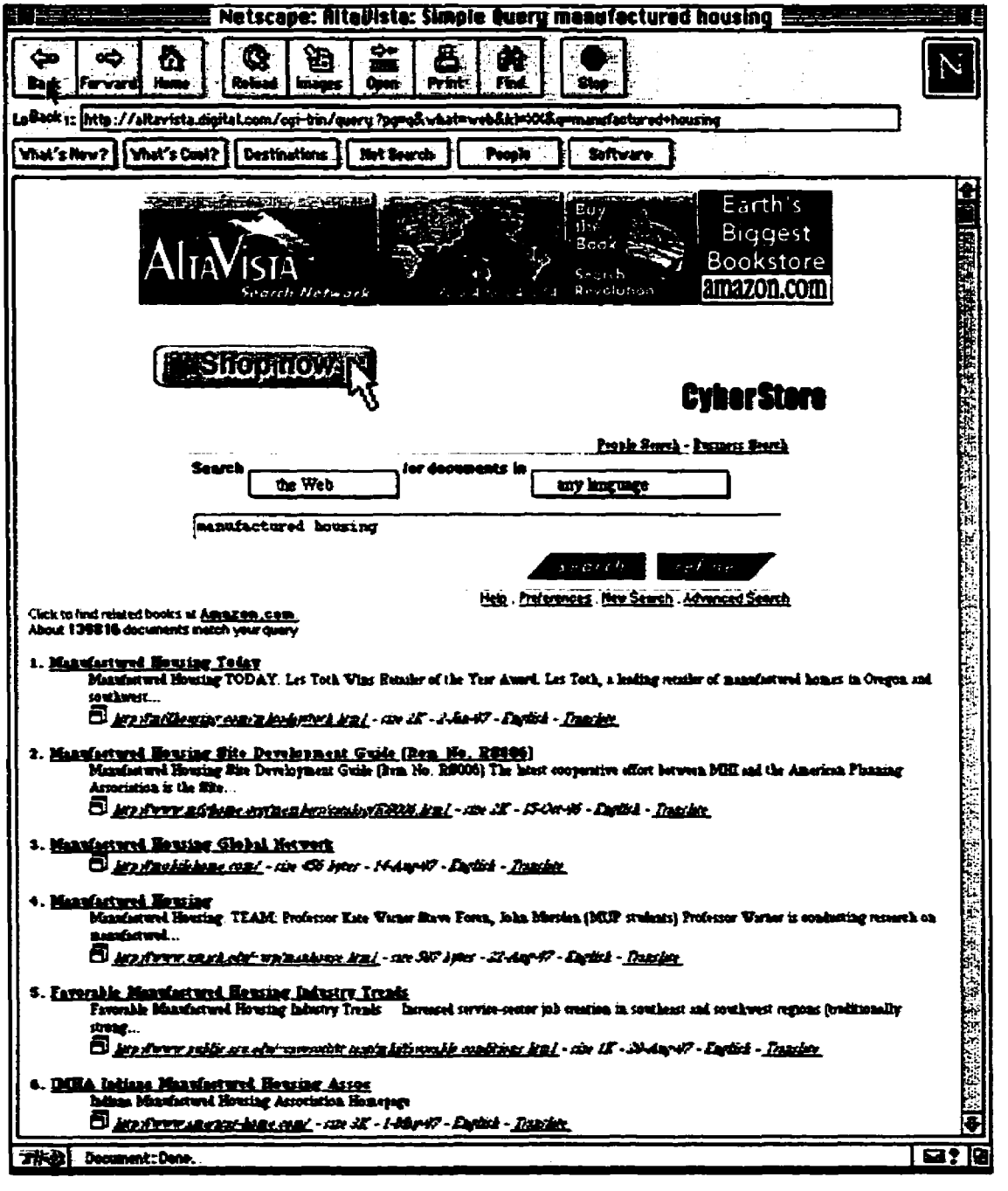


Figure 4.4 Results of search using AltaVista™ search engine (http://altavista.digital.com/sgi-bin/query?pg=q&what=web&kl=XX&q=manufactured+housing. 1997)

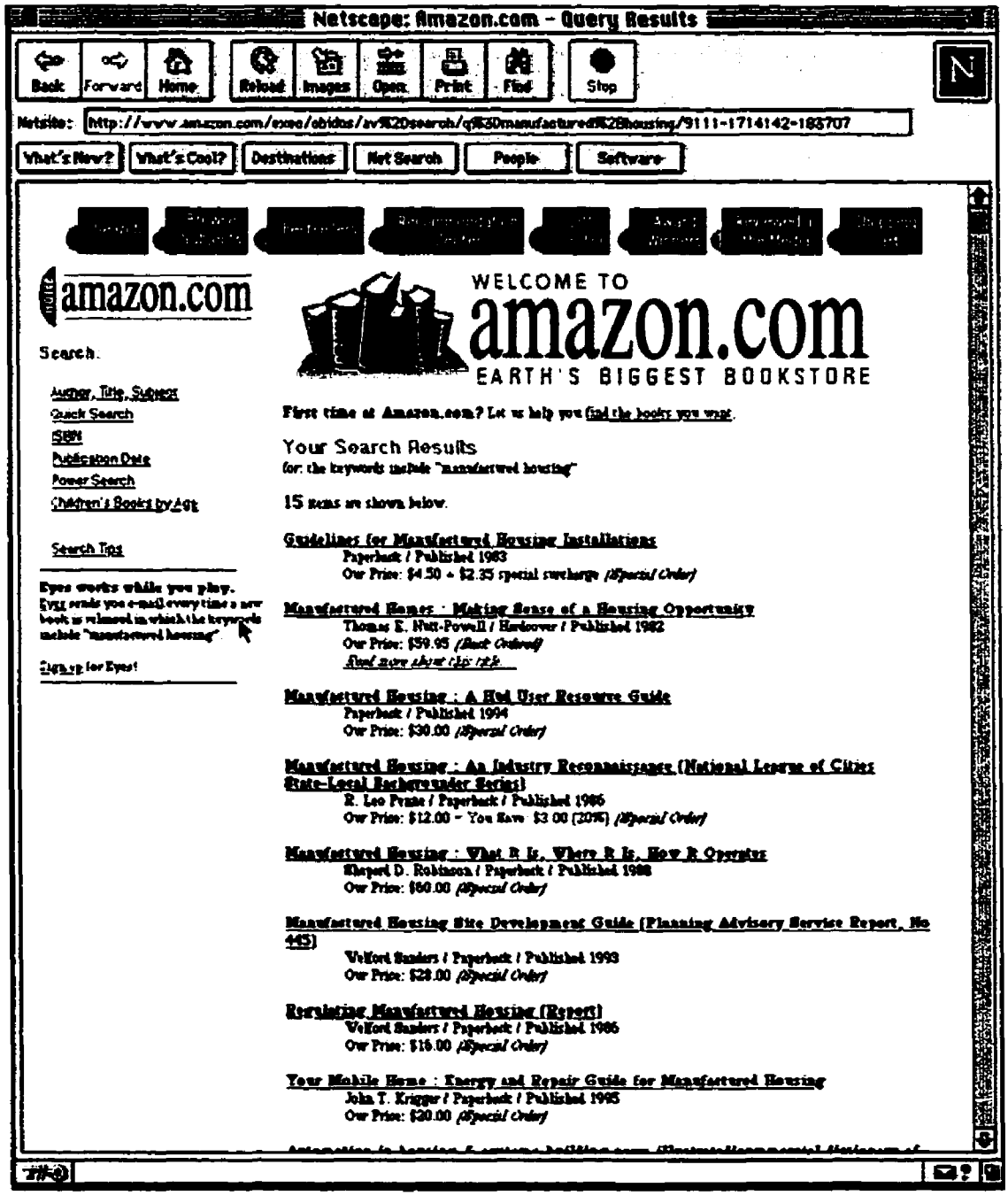


Figure 4.5 List of reference material given by amazon.com(http://www.amazon.com/exec/obidos/av%2Dsearch/q%3Dmanufactured%2Bhousing/9111-171412-183707. 1997)

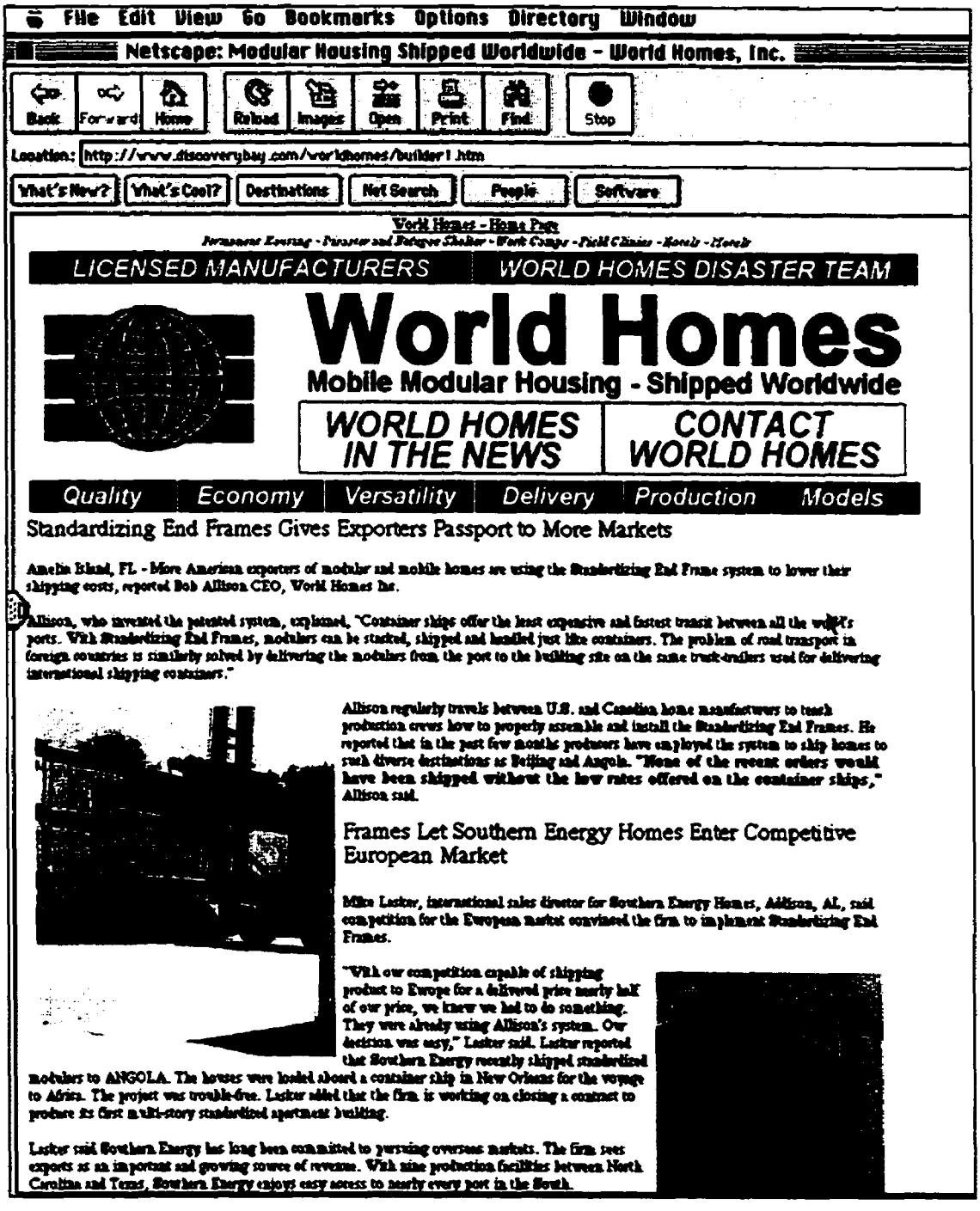


Figure 4.6 Example of Web page found through search engine (http://www.discoverybay.com/worldhomes/builder1.htm. 1997)



FIgure 4.7 Translation into Spanish of previous Web page (http://babelfish.altavista.digital.com/cgi-bin/translate?. 1997)

One of the main problems with sourcing information through search engines of this type is that most of them can only access a very small portion of the Internet. AltaVista™'s search engine is limited to a maximum penetration of 28% of the Internet, and many of the sites listed in the search results are Websites that are no longer active.[1] Other search engines such as Lycos™ have a lower number of 'hits,' but tend to find a larger percentage of active sites, resulting in a comparable number of useful sites that may contain the desired information (Table 4.12).

Another common problem with Internet searches is having to browse through sites that are not relevant to the user's search topic, that appear in the search results because of similar or ambiguous keywords or unclear search parameters. The use of specific and precise keywords and proper search syntax will reduce the number of irrelevant results.

After visiting a number of sites, a list of useful Website addresses was compiled. In order to assess what extent of exposure manufactured housing companies have on the WWW, a table format was developed to display a list of these companies with an overview of what information was offered on their sites. Table 4.13 gives a partial outline of the various aspects that could be analysed.

An example of one company's Website (Figures A.4.1, A.4.2 and A.4.3) is given in Appendix A.4 along with examples of Web pages from other companies that are involved in manufacturing building products (Figures A.4.4, A.4.5 and A.4.6). Similarly, the Website of the Ontario Manufactured Housing Association (OMHA) was visited to demonstrate the type of information made available on the Web by home manufacturing associations. In this example (Figures A.4.7, A.4.8 and A.4.9) the OMHA had chosen to subscribe to the LinkExchange™ to increase its exposure on the Internet. In addition, the OMHA provides its own compilation of links.

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[1] State of the Internet (www.pegasusri.com).

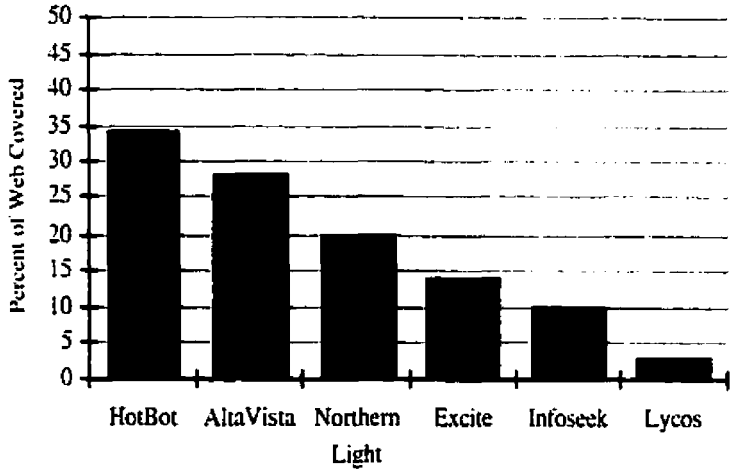


Table 4.12 Web coverage obtained by commercial search engines (Pegasus RI. 1998)

WEBSITE	# OF PAGES/ OPTIONS	BACKGROUND	TECHNICAL SPECS.	SHIPPING/ ORDERING	E-MAIL	GRAPHICS	DRAWINGS	LINKS
http://www.advantagehomes.com	5	Y	N	N	Y	Y	Y	N
http://www.coastlineconst.com								
http://www.fuquahomes.com								
http://www.net-magic.net/worldhomes								
http://www.mfghomes.com/brconstruction								
http://www.santiagohomes.com								
http://www.silvercrest.com								
http://www.thekarstenco.com								
http://www.timbertruss.com/main.htm								
http://www.viceroy.com								

Table 4.13 Information to be compiled for housing manufacturers' Websites

CHAPTER FIVE: THE PROPOSED TOOL

5.1 Introduction

As part of the research for the Next Home™ project[1], a prototypical software demonstration was developed by the author as part of the Next Home™ design team. Demonstrated in the exhibition, this software application displayed a variety of building products and services to the user. Some degree of interactiveness was introduced to allow for greater user participation in the selection of materials and layouts. This aspect shows a potential advantage of the electronic format as a display option. The user can control and view exactly what is required while the opportunity to browse as with a traditional catalogue still exists.

The goal was to produce a software package, whether available on a CD-ROM or through the Internet, which would showcase Canadian (and specifically Québec) companies involved with the manufacturing and exportation of prefabricated housing units. These companies would include not only home builders and building product manufacturers, but also architects, developers and real estate agencies, governmental housing research and housing export organisations, building technology specialists and home manufacturing associations. Each of these companies would benefit in various ways from having a database of prefabricated housing models and building products that would be easy to update and expand when compared to traditional paper-based catalogues. It would also be readily available and accessible for simple, reliable and fast communication across the world due to the inherent nature of electronic media.

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[1] The Next Home™ is a mid-rise housing unit which could be built as a detached, semi-detached or row unit. It offered both the homeowner and home builder flexibility with respect to the internal layout (i.e. whether it was made for one, two or three families or the location of the entrance and interior stairs) and the external features (i.e. exterior cladding, roof form and shape, balcony arrangement or window treatment).

Section 5.2, Design of Software, will explain the logic and basic design of the software as proposed by the author and will also include intended schematics and descriptions of the desired functions, menus and options. Section 5.4, Description of the Demonstration Software Tool, will show the programme in its final form as the demonstration prototype of the software. This was a result of the initial design relating to the logic and structure of the tool by the author in conjunction with the programming skills of K-OS Multimédia, a multimedia software company.

5.2 Design of the Software

This section describes the criteria and suggestions for the logic, manipulation, and visual design of the programme.

5.2.1 Introduction

The programme is divided into three main parts:

Part A: Background to Companies;

Part B: Catalogue and Interactive Mode: Housing;

Part C: Catalogue: Building Products.

Each part can be accessed directly from the main menu (or introduction screen) or in series by following each part consecutively. Part A is essentially a database of company *brochures*, in that there is background information and brief descriptions of the companies' products, production methods, shipping and packaging information, economic and financial aspects, safety and quality controls, use of recyclable products, energy conservation programmes and

environmental considerations. Part B contains information relating to housing products and allows the user to choose various options with respect to the specific design choices and house layouts. Part C can be considered as a tool to finish the house chosen in Part B, or as a catalogue for simply viewing and ordering certain building products.

5.2.2 Screen Layout

The display has a top menu bar with pull-down menus for the *file, search* and *print options*. The file menu allows the user to perform standard application file functions, such as quitting the application, saving screen information (either graphics or text) to a file and opening previously saved information. The bottom part of the display is comprised of the *path tree*, the *movement buttons* and the *information buttons*. Each of the five components (given in italics) of the display will be explained in more detail in the relevant sections. A sketch of the display is shown in Figure 5.1.

5.2.3 Search Option

The search option is engaged through a pull-down menu from the top menu bar. The keyword search prompts the user to enter the desired word in the search entry box. The search tool treats the entered characters as if there were a "wild card" preceding and following the entry. For example, if the user enters *windo* in the search entry box, the search tool will display all the occurrences of *windo* as part of a word or series of words. So in this case, the search tool might find *windo*ws, casement *windo*ws and *windo*ws and doors. The user then selects one of the listed findings of the search to bring up a list of all the occurrences of the selected finding. Each occurrence of the selected finding is listed, showing in which index it can be

found and thus accessed. Selecting a specific occurrence takes the user to the appropriate part of the programme.

5.2.4 Print Option

The print option is engaged in a similar way to the search option (i.e. through the top menu bar). The user can print a single screen or a range of screens at any time during the use of the programme. There is also an option on the file menu of the top menu bar allowing portions of text or graphics to be copied and pasted onto a clipboard. The print option allows the clipboard to be printed at any time.

5.2.5 Path Tree

The path tree is the index on the lower left part of the screen which shows the specific area of the programme that the user is viewing. It can also be used as a directional tool: for example, if the user is in the index for the model listing of a certain product and another company's product is desired, they can immediately select the company index from the path tree rather than reversing manually through each screen or using the search option.

5.2.6 Movement Buttons

These buttons allow the user to flip backward and forward through the screens, which is necessary if an index or information window is too long to fit on one screen. Similarly, users can retrace their steps using the direction (arrow) buttons. The home and start buttons take the

user back to the beginning of a section (either Parts A, B or C) or the main menu (Introduction screen).

5.2.7 Information Buttons

Once a model has been selected and the user is in the housing or building product information mode in Part B or C respectively, the user can toggle back and forth between the four information categories: information/specifications, drawings, costing sheet and additional information.

5.2.8 Indexing System

Each main index lists the major headings for that section. When one of the major headings is selected or highlighted, the secondary index (located below the main index) displays a list of all the minor headings associated with the selected major heading. This allows all the major headings to be continuously displayed on the screen while browsing through the minor headings of any major heading. This layout is applicable if a third index of subheadings is required in conjunction with the main and secondary indices. An illustration of the logic behind the indexing system can be seen in Figure 5.2.

5.2.9 Database for Part A: Background to Companies

In Part A: Background to Companies, the user can search for information on companies involved in prefabricated house construction and building products used in all areas of standard

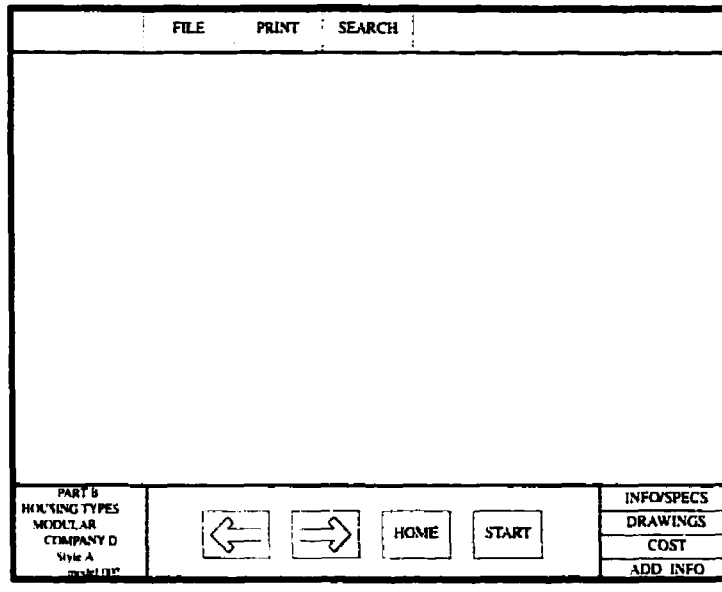


Figure 5.1 Sketch of proposed screen layout with file commands, path tree and movement and information buttons

INDEX OF HOUSING TYPES
PANELISED
LOG PROFILED
MOBILE
LOG-HANDCRAFTED
TIMBER FRAME
STEEL SYSTEM
INDUSTRIAL

INDEX OF COMPANIES FOR SELECTED HOUSING TYPE
MODULAR
COMPANY A
COMPANY B
COMPANY C
COMPANY E
COMPANY F
COMPANY G

INDEX OF MODELS FROM COMPANY OF SELECTED HOUSING TYPE
MODULAR
COMPANY D
Style A
model 001
model 002
model 003
Style B
model 011
model 012
model 013

Figure 5.2 Sketch of indexing system menus

residential and commercial construction. Figure 5.3 outlines the logic and layout of this part. This section allows the user to browse through two indices; the first is an index of housing types (Table 5.1) and the associated companies involved in that area, while the second index contains a list of building products (arranged by MasterFormat Divisions, Table 5.2) and the companies manufacturing these construction materials. In the former case, the user can select a specific housing type (e.g. modular), and view all the prefabricated housing manufacturers who build modular type homes. Similarly, the user can select a specific building product from any of the MasterFormat Divisions or Sub-divisions (e.g. 08 Doors and Windows or 08630 Casement Windows) and browse through a list of all the companies that manufacture that specific building product. In both these cases, as in the previous examples, the user can select a company, whether it be a modular type home manufacturer or a casement window manufacturer or supplier .

The software displays information on the selected company. A detailed company profile contains information such as the company's history, shipping and packaging information, quality control and safety and environmental standards. In addition, links would be provided so that the user can directly access that company's, through a Web browser application, or even send electronic mail to the company via the Internet. A brief product list is also shown, which provides the link to Parts B and C. Otherwise, the user can continue browsing through the database of company profiles.

5.2.10 Database for Part B: Catalogue and Interactive Mode: Housing

Figure 5.4 demonstrates the logic behind Part B: Catalogue and Interactive Mode: Housing. The user can select a prefabricated home through two methods of searching: by housing type or by company name. Each index is similar to the search indices found in the housing section of

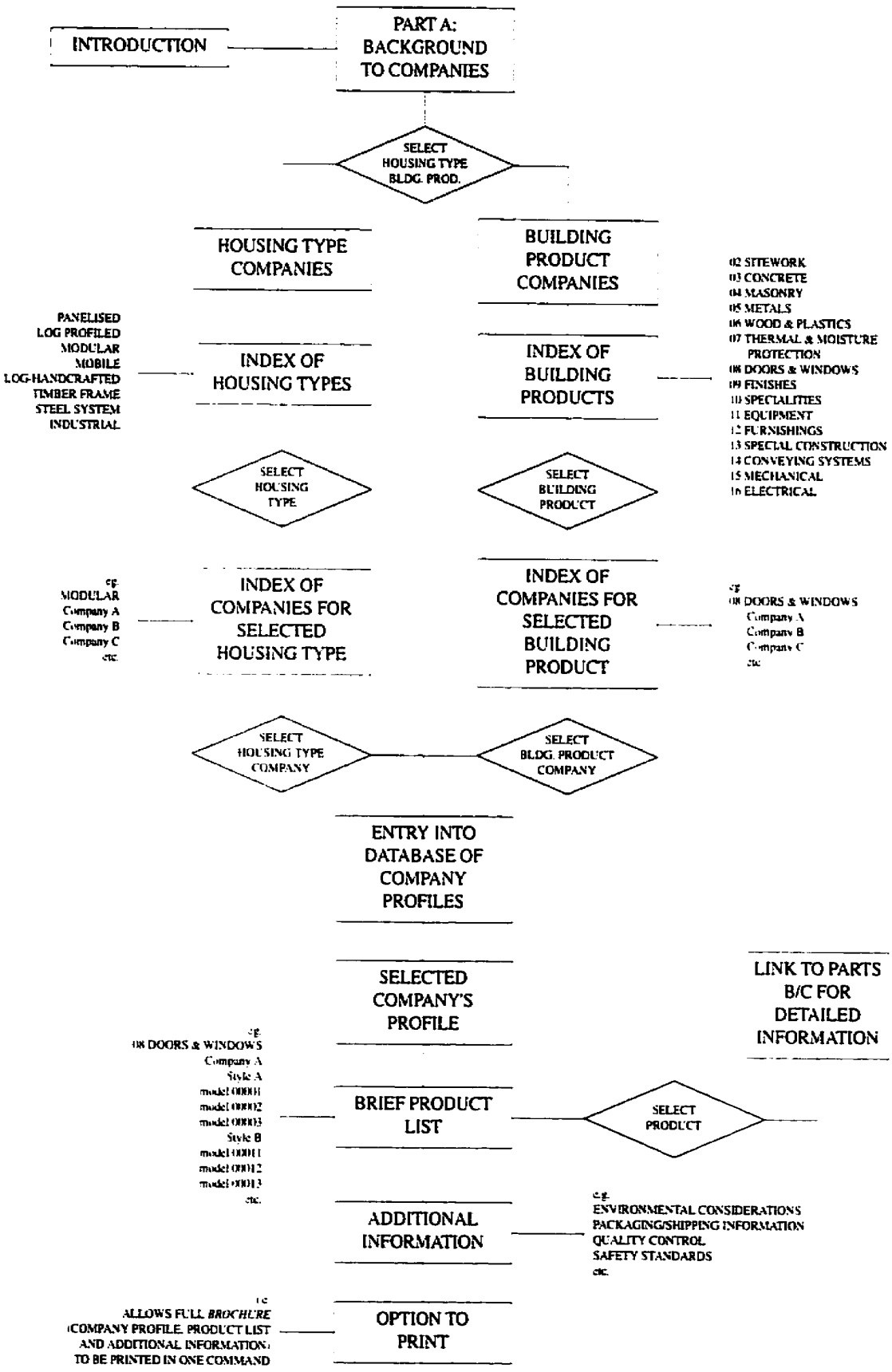


Figure 5.3 Flowchart of layout and logic of Part A: Background to Companies

HOUSING TYPES
Panelized
Log-Profiled
Modular
Mobile
Log-Handcrafted
Timber Frame
Steel System
Industrial

Table 5.1 List of prefabricated housing types

BUILDING PRODUCTS: MasterFormat Divisions	
No.	NAME
02	Sitework
03	Concrete
04	Masonry
05	Metals
06	Wood & Plastics
07	Thermal & Moisture Protection
08	Doors & Windows
09	Finishes
10	Specialities
11	Equipment
12	Furnishings
13	Special Construction
14	Conveying Systems
15	Mechanical
16	Electrical

Table 5.2 List of MasterFormat Divisions

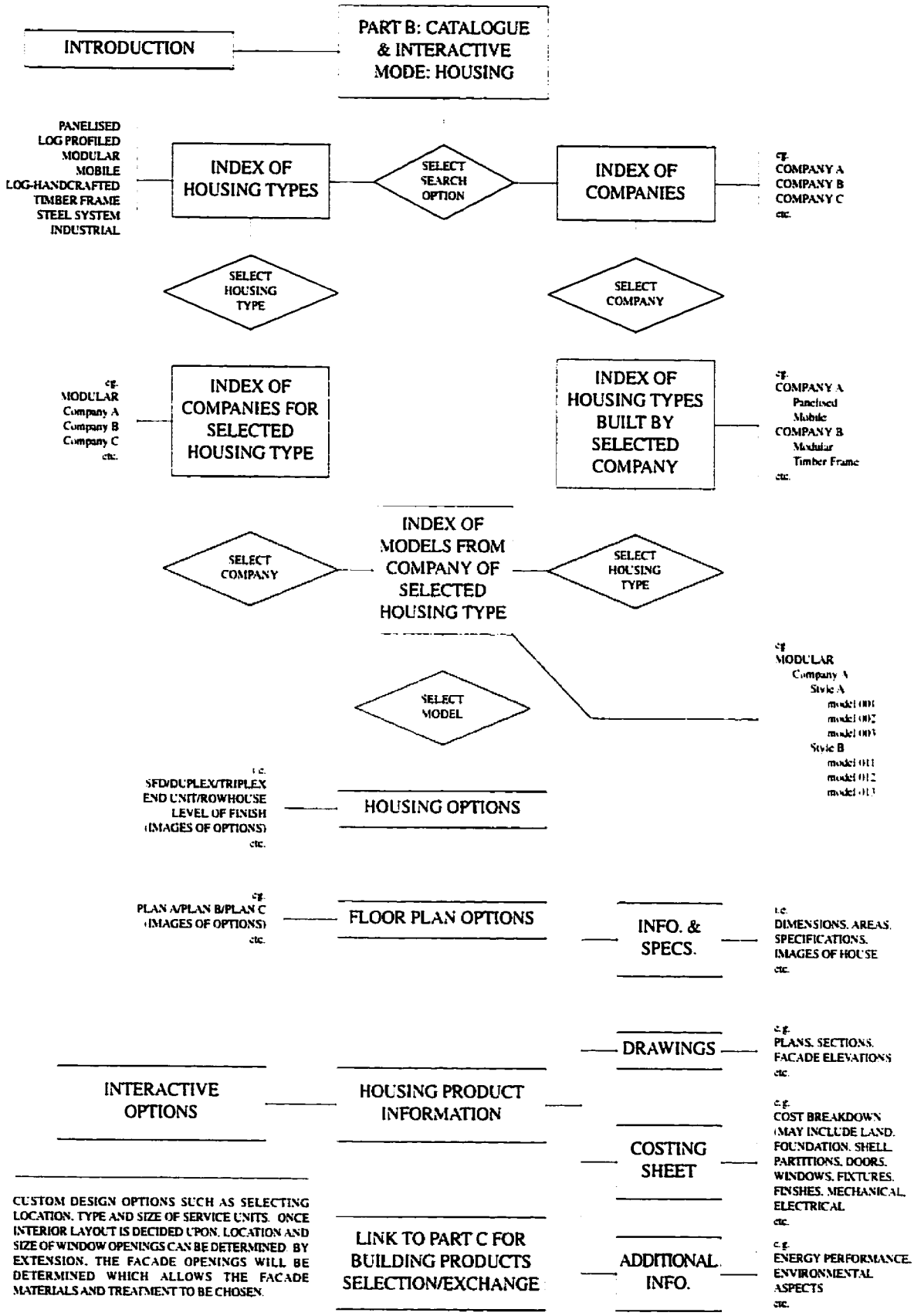


Figure 5.4 Flowchart of layout and logic of Part B: Catalogue and Interactive Mode: Housing

Part A. When searching for a specific housing type, the user can select a company that manufactures that housing type, and vice versa in a case where the user initially searches by company name. In other words, both search methods result in a list of individual home models of a certain prefabricated housing type manufactured by a specific home building company. Using this list, the user can then select a specific model of the desired housing type built by a certain company.

Once the preferred model of prefabricated home has been selected, the user then undertakes a series of choices of exterior features (Table 5.3). The programme offers only those choices relevant to the specific model chosen. This is important because the choices available from one manufacturer to another, as well as from one model to another, are often very different and can not be standardised into a general list of options. Similarly some exterior options may become unavailable due to the choice of previously selected exterior options, e.g. if a unit built on grade is initially chosen, the software will not allow to user to select a garage for that unit. Table 5.4 shows summaries for the selected exterior options of two examples of homes of the specified model built by the chosen company.

The user can also choose from a selection of floor plan options. These floor plan options, while being few and limited, offer a wide range of flexibility and choice. The floor plan options are limited because of the obvious but essential requirement of being consistent with the previously chosen options for the exterior features. Once the final floor plans are chosen, the software displays a summary of all the options (i.e. displays all the floor plans and elevations of the house). The building specifications and costing breakdown and summary are also available. The programme also allows for certain additional options where the user can interactively choose to replace certain interior and exterior elements, e.g. windows, or the type and size of service units such as the kitchen and toilet. Similarly there is a link to Part C so that the user can re-select or exchange standard building products which are part of the finished

HOUSING TYPE		(Panelised/Log Profiled/Modular/Mobile/etc.)
COMPANY		(Fermco)
MODEL		(The Next Home)
HOUSE TYPE		(Detached/Semi-Detached/Row)
LOCATION[1]		(Left Unit/Middle Unit/Right Unit)
ENTRANCE LOCATION		(Left Side/Right Side)
GROUND LEVEL		(On-Grade/Basement)
TOP FLOOR		(Mezzanine/Attic Crawl Space/Cathedral Ceiling)
GARAGE[2]		(None/Basement Floor)
BAY[3]	Location	(None/2nd Storey/3rd Storey/2nd and 3rd Storeys)
	Roof	(Pitch/Slope/Vault)
ROOF ELEMENT	Type	(None/Pitch/Square)
	Size	(Small/Large)
	Location	(Left/Centre/Right)
OCCUPANCY[4]		(Triplex/Duplex/Single Family)
HOME OFFICE[5]		(None/Ground Floor)

NOTES:

[1]These locations are applicable as follows:

Detached	None
Semi-Detached	(Left Unit/Right Unit)
Row	(Left Unit/Middle Unit/Right Unit);

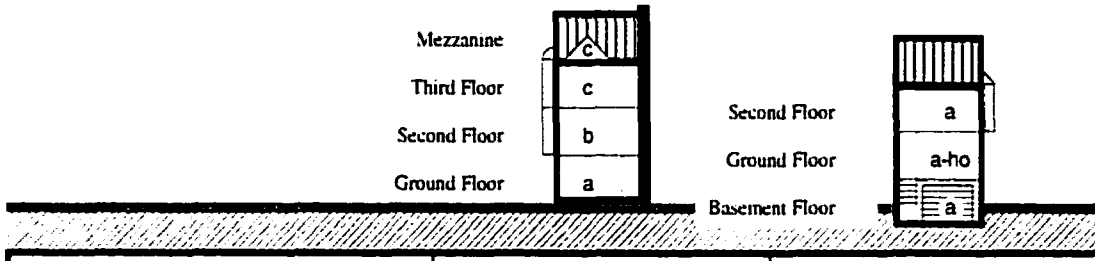
[2]Garages are located on the basement floor of a Basement Unit as long as the basement floor is not a single storey unit;

[3]Bays are located on the opposite side to the entrance;

[4]There can be two types of duplex units, i.e. aab or abb; however if we have abb-B or abc-B (basement units) the basement floor can not have a garage;

[5]Home Offices are located on the ground floor.

Table 5.3 Options available for customisation of external features in Part B: Catalogue and Interactive Mode: Housing



		EXAMPLE 1	EXAMPLE 2
HOUSING TYPE		Panelised	Panelised
COMPANY		Fermco	Fermco
MODEL		The Next Home	The Next Home
HOUSE TYPE		Row	Detached
LOCATION		Left Unit	
ENTRANCE LOCATION		Right Side	Left Side
GROUND LEVEL		On-Grade	Basement
TOP FLOOR		Mezzanine	Attic Crawl Space
GARAGE		None	Basement Floor
BAY	Location	2nd and 3rd Storeys	3rd Storey
	Roof	Vault	Slope
ROOF ELEMENT	Type	Pitch	None
	Size	Large	
	Location	Left	
OCCUPANCY		Triplex	Single Family
HOME OFFICE		None	Ground Floor

Table 5.4 Customised features of two examples chosen in Part B: Catalogue and Interactive Mode: Housing

house, e.g. door hardware and roof shingles. In both of the pervious cases, the drawings and cost breakdown will be adjusted accordingly.

5.2.11 Database for Part C: Catalogue: Building Products

The functioning of Part C: Catalogue: Building Products is initially identical to Part B (Figure 5.5). The user can search for models of building products either by selecting the type of building product (using the MasterFormat Divisions and Sub-divisions) or by choosing a company which manufactures the desired building product. If the user has initially selected the product, the selection of a specific company must then be chosen, and vice versa in a case where a company has been selected initially.

Once a specific model of a building product has been chosen, the user can view its specifications, drawings and images of the item and pricing information. Other products can be chosen in the same way and added to a 'shopping list'. Similarly if the user has arrived in this part from the interactive housing mode, they can select or exchange products in order to customise their prefabricated housing unit.

5.3 Preparing to Use the Demonstration Software Tool

5.3.1 Hardware and System Requirements

The tool was programmed specifically for PC-based machines and will only run on computers with a Windows-based platform, either Microsoft Windows® version 3.1 or Windows 95. A

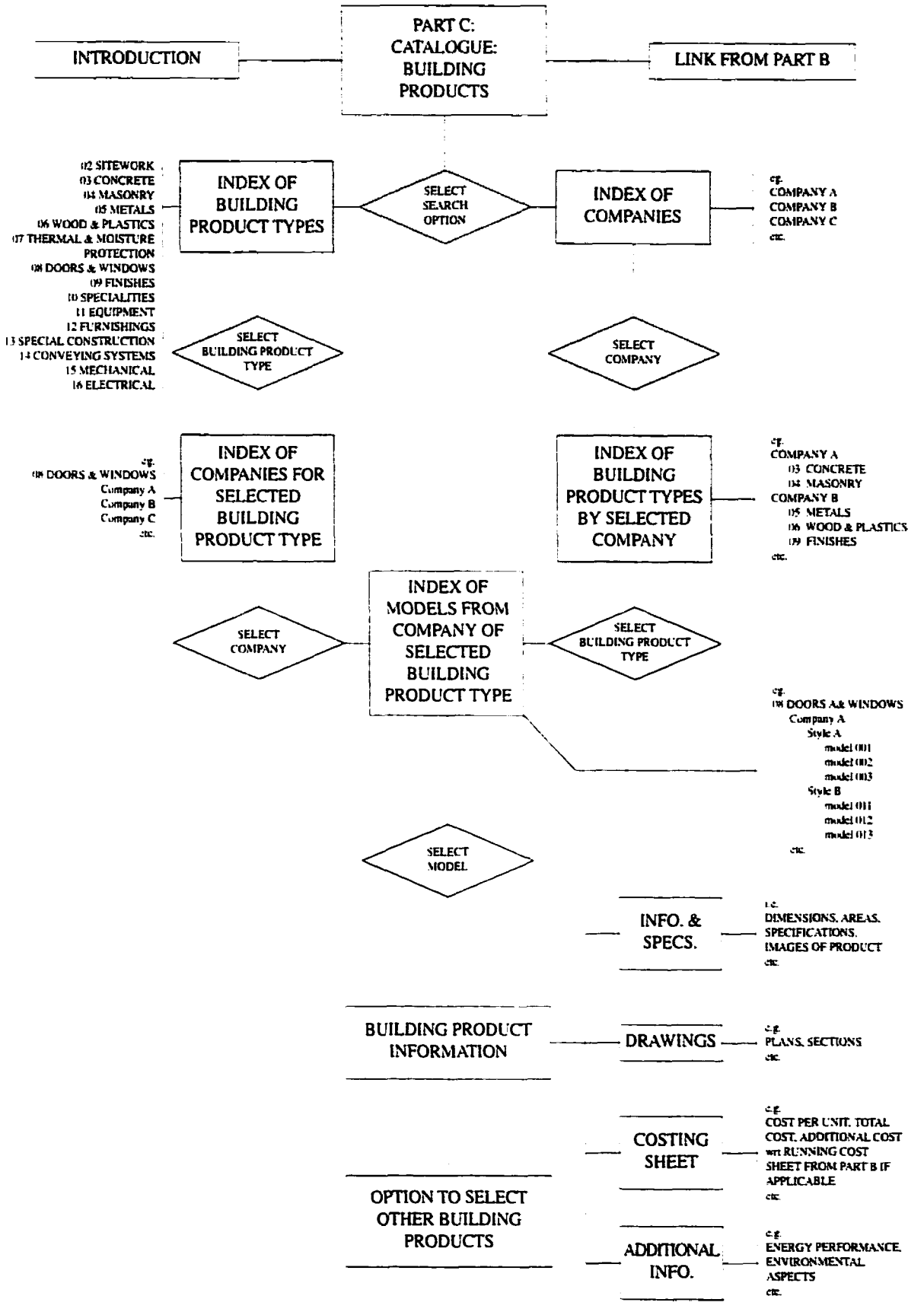


Figure 5.5 Flowchart of layout and logic of Part C: Catalogue: Bulding Products

CD-ROM drive is required for both the installation and use of the software programme. A minimum of 16 MB of RAM (random access memory) is recommended, and 2.75 MB of free hard drive space or ROM (read only memory) is required for the installation of the application. In order to have the window for the programme take up the full screen, the display area should be set at a screen resolution of 640 pixels by 480 pixels, horizontal number by vertical number respectively. The display area control is accessed by clicking on a blank portion of the screen. then clicking on properties and then settings or by going to Start Menu\Settings\Control Panel\Display\Settings or Desktop\My Computer\Control Panel\Display\Settings.

5.3.2 Installation

The installation is simple: insert the Québexport CD in the computer's CD-ROM drive and run the installation application titled Setup 95. The appropriate drives for both the destination and source folders must be specified and the correct version of Windows must be selected. The setup application now loads the appropriate files from the CD-ROM onto the specified destination drive, typically the computer's hard drive. This process takes a few moments and once completed the software is ready to be used. During use, the user must ensure that the Québexport CD-ROM is still available in the CD-ROM drive, since the application needs to access information, such as graphics and link buttons, from the CD-ROM.

The CD-ROM contains 20.6 MB of information in 20 folders and 758 files. The installation setup puts 2.75 MB of information in 5 folders and 204 files on the computer's hard drive (drive C in this case) with paths C:\WINDOWS\SYSTEM\ and C:\SHQDEMO\. A shortcut is also created with the path C:\WINDOWS\Start Menu\Programs\SHQDEMO\ so that the application can be easily accessed through the Windows' Start Menu.

As with many prototypical designs, this software is not exempt from minor problems, such as bugs which cause the application to crash, not only unexpectedly but also predictably, under certain circumstances. These problems can be resolved by erasing all the installed files from the hard drive and by reinstalling the programme from the CD-ROM.

5.4 Description of the Demonstration Software Tool

5.4.1 Introduction

The first screen which appears upon loading the application introduces the software with the title Québexport. The top menu bar displays buttons for the software credits, three language choices and a Quit option (Figure 5.6). The credits list the writers of the software programming as well as the designers of the software logic. The language option is a pertinent feature for the tool, as its inherent use is related to the export of housing which directly implies that it will be available to audiences around the world. The targeted user may be proficient in languages other than English and French, the two languages of business in the Canadian housing industry, so the prototype displays a button for Spanish as an example of a foreign tongue. The idea is that this software can be upgraded to include any language desired so that international users can use the programme. In this prototype programme, only the French language option was made available.

There are two principle modes in this software: the purchasing mode *(achat)*, and the catalogue mode *(catalogue)*. Initially the user may typically browse through the catalogue mode in order to become familiar not only with the products included for display but also to understand how the software works, especially with respect to the navigation within the programme and the

search methods available. For example, the user may look through the catalogue to examine products and then go into the purchasing mode to select a house. However, users familiar with the software may directly enter the purchasing mode and choose a house before browsing for associated products, or toggle back and forth between the two modes in order to customise their selected house with specific building products available through the catalogue mode. In this chapter, a description of the catalogue mode will be given first, as it has a more basic structure than the purchasing mode. The purchasing mode is more easily explained once familiarity has been achieved with the catalogue mode, as it involves previous user knowledge of the catalogue.

5.4.2 Catalogue Mode

When the catalogue button (*catalogue*) on the introduction screen is clicked on, a screen that shows the basic graphic structure of the catalogue mode. The information areas are blank, but the main parts of the catalogue mode are visible. Each of these three main parts of the catalogue mode have their individual buttons: prefabricated building systems (*systèmes*); building and construction products (*produits*); and related building, construction and architectural services (*services*). Each of the three parts has a slightly different methodology for searching for information, which is performed using the menus or indices at the bottom of the screen (found below the buttons for the three main parts of the catalogue mode).

5.4.2.1 Systems

The systems part, or database, can be searched by company, system or model (Figure 5.7). For example, when looking for a specific prefabricated building system, the user can search



Figure 5.6 Introductory screen

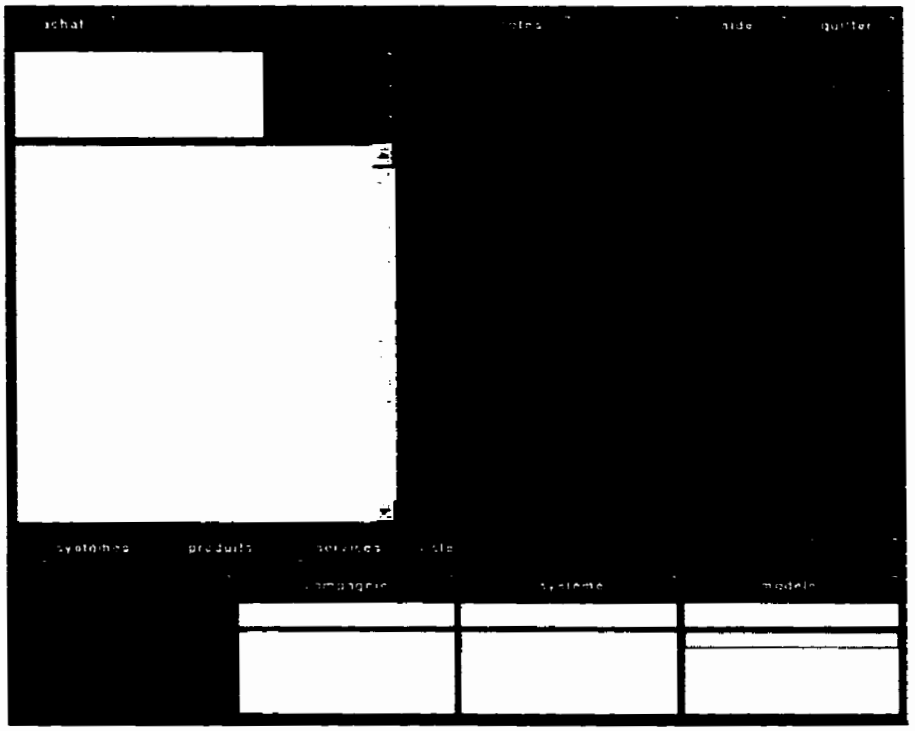


Figure 5.7 Systems part screen layout

either by looking for a company involved in manufacturing prefabricated building systems, by selecting a particular building system (e.g. panelised or modular), or by searching through a list of model names of individual prefabricated buildings which are manufactured by all of the companies involved in this area of construction. Table 5.5 displays the information available in the systems part of the demonstration software.

5.4.2.2 Products

The products part has a slightly more sophisticated search process. The three basic components or indices of the systems part are present as before, with the addition of a fourth index which allows the user to search for building products using the MasterFormat Divisions (Figure 5.8). This system is the construction industry standard for the classification of all building products and construction materials into categories and sub-categories. This results in a standardised solution for organising these items into a format that is consistent and convenient, so that builders and architects across Canada and the United States have a simple way of listing materials for preparing specifications or cost analyses.

The MasterFormat index is divided into two columns: one for searching using the MasterFormat Divisions, and another for listing the MasterFormat Sub-Divisions. Since each MasterFormat Division contains many Sub-Divisions – in many cases well over a hundred – the programme allows the user to search using Sub-Divisions which are more specific. For example, if a certain MasterFormat Sub-Division is known, the user can access it without having to know which MasterFormat Division it is in.

As with the systems part, users can search for a building product either through the company index, by looking for a particular building product name, or by searching through the index

listing of specific model names or numbers of individual building products. Table 5.6 displays the information available (i.e. company names with models produced) in the products part of the demonstration software.

5.4.2.3 Services

The services part has only two indices with which to perform a search: by company and by the type of building service offered (Figure 5.9), e.g. architectural services, computer-related services (CAD, networks and Websites, etc.) and landscape architecture. Table 5.7 displays the information available in the services part of the demonstration software.

5.4.2.4 Examples of Searching within the Systems Part

In this section, two examples of a search will be described using the systems part of the software prototype. The first will be undertaken through the company index and the second will use the building system index.

5.4.2.4.1 Search by Company Name within the Systems Part

In this example, it is assumed that the user would like to use a specific home manufacturing company. This might be desirable if the user has a connection to that commune, or has been advised to use that company. Similarly distance may be a factor: the user might want to choose a company that is located nearby so that they can meet with the builders in person and follow the home manufacturing process in the factory. If the user is familiar with a company that

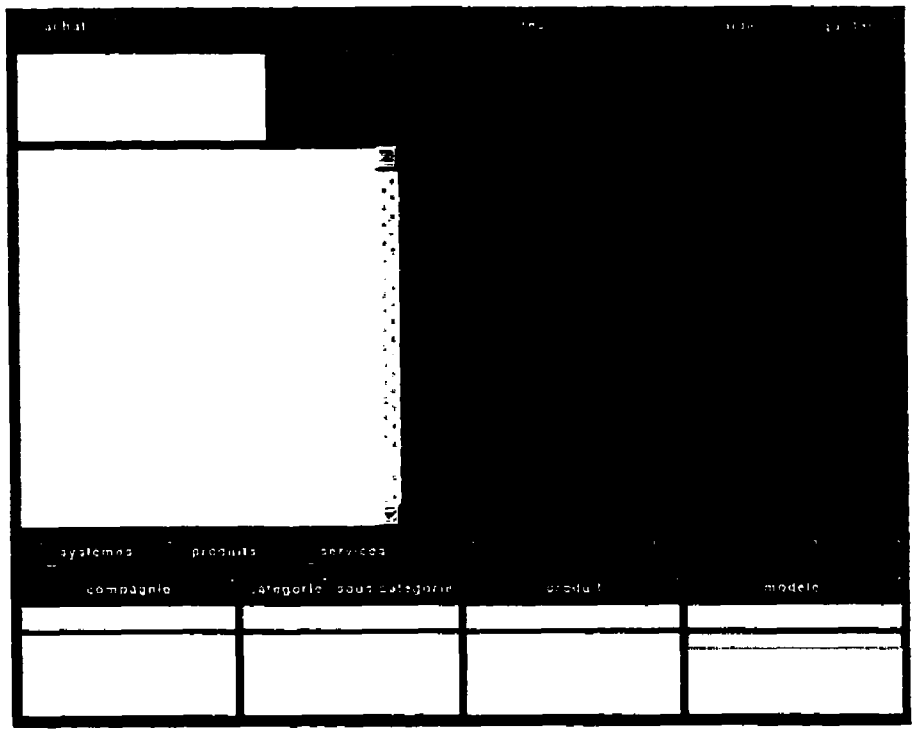


Figure 5.8 Products part screen layout

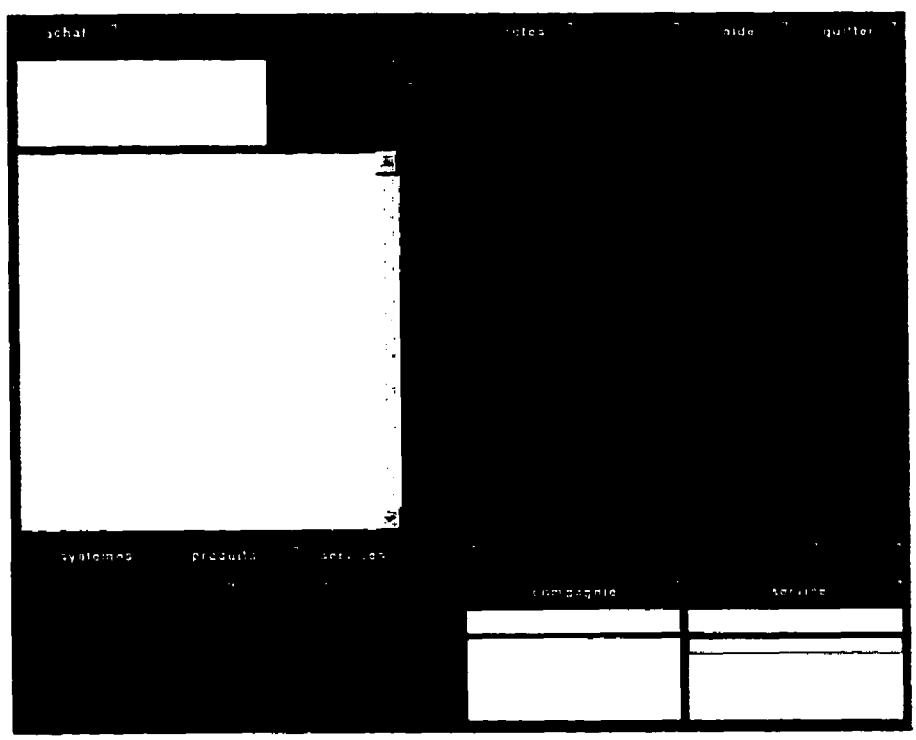


Figure 5.9 Services part screen layout

compagnie	système	modèle
Fermco Industries Ltd.	Panneaux usinés et composants	Maison Rédecouverte
		Le Geai Blue
XYZ Inc.	XYZ (demo)	XYZ (demo)

Table 5.5 Tabulation of entries in system indices (*systèmes*)

compagnie	service
Gérard Gingras	Désigner-Intérieur
K-OS Multiledia Inc.	Logiciels Spécialisés en Habitation

Table 5.7 Tabulation of entries in service indices (*services*)

Categories des Produits	
No.	NOM
02	Aménagement de l'Émplacement
03	Béton
04	Maçonnerie
05	Métaux
06	Bois et Plastique
07	Isolation et Étanchéité
08	Portes et Fenêtres
09	Finition
10	Produits Spéciaux
11	Équipement
12	Ameublement
13	Installations Spéciales
14	Systèmes Transporteurs
15	Mécanique
16	Électricité

Table 5.9 List of MasterFormat Divisions

compagnie	modèle
B.P.C.O. Inc.	**Vert Forêt (B.P.C.O.)**
	Bleu Cristale (B.P.C.O.)
	Gris Antique (B.P.C.O.)
	Tourquoise (B.P.C.O.)
Benjamin Moore & Cie Ltée.	**Latex Regal Wall Satin (215)**
	Latex Regal AquaGlo (333)
	Latex Regal AquaPert (310)
	Latex Regal AquaVelvet (319)
Edge Hardware Inc.	**Suzuka**
	Estoril
	Magny
	Sebring
Electroménagers Sans Frontières	**St-George VE0 7C5**
	Plaque au Gaz 60cm C660 2CNS
Forbo Industries Inc.	**Marmoleum 3844 Jade**
	Marmoleum 3845 Blue
Gérard Crête & Fils Inc.	**2" x 2" x 8'**
	2" x 10" x 14'
	2" x 6" x 14'
Geberit Manufacturing Inc.	**Geberit 150.165**
	Geberit 150.156
	Geberit 150.157
	Geberit 150.158
GranitiFiandre SpA	**AT036 Blue Bay**
Industries Jager Inc.	**Spacejoist^{MD}**
Les Bois de Plancher P.G. Inc.	**2-1/4" x 25/32" (57 x 19mm)**
	1-3/4" x 25/32" (44 x 19mm)
	2-1/2" x 25/32" (63 x 19mm)
	2" x 25/32" (51 x 19mm)
Les Industries Melco Ltée.	**T2V-0906 35-9/16" x 23-5/8"**
	T2V-0908 35-7/16" x 31-1/2"
Les Rangement Idées-Range Inc.	**Rangement 001**
	Rangement 002
Matériaux Cascades Inc.	**Panneau Sonopan 4' x 4'**
	Panneau Sonopan 4' x 10'
	Panneau Sonopan 4' x 8'
	Panneau Sonopan 4' x 9'
Sarnafil Inc.	**Membrane Sarnafil S 327-12**
	Membrane Sarnafil S 327-13
Uniboard Canada Inc.	**Érable Forêt**
	Érable Bourgogne
	Érable Naturel
	Récif
Westroc Inc.	**W-1001**
	W-1002
Wiremold Canada Inc.	**Access 5000**
	Access 6000

Table 5.6 Companies with active (in bold) and non-active models

manufactures prefabricated buildings, specifically houses, they can find the desired company in two different ways. The first is to click on the company button (*compagnie*) and browse through the company index (which lists all the home manufacturing companies in alphabetical order) in order to find the desired company whose name can then be selected from the index by highlighting it with a click of the mouse. The second way to select the company requires that the user know the name of a desired company. The user begins by typing the first few letters of the company name in the blank space below the compagnie button (*compagnie*) and above the company index.

In both cases the company's screen will appear: the left half of the screen contains the company logo and a text window (Figure 5.10). The text window's default setting shows the company's profile (its history and background) accessed by clicking on the first of three buttons appearing next to the company logo. Pressing either of the two other buttons, *contact* and *transport*, will display the corresponding information in the text window. When the contact button is selected, the company's address, telephone and fax numbers, contact person, E-mail address and location are displayed. The E-mail address is an active HyperText link button which, when clicked, opens an electronic mail application such as Pegasus Mail, allowing the user to send E-mail directly to that company while using the software tool. A similar link exists with the location; clicking on the location: automatically opens a Web browser application, such as Netscape Navigator/Communicator or Microsoft Internet Explorer, allowing the user to view the selected company's.

The right half of the screen displays an image of the company, either an example of one of the prefabricated homes that this company manufactures, or simply an image of the company's plant. In this example, the assumption is made that the user is familiar with a company called Fermco (Figure 5.10). As mentioned above, the user can either click on the company button (*compagnie*) and browse through the alphabetical list of home builders or start typing the name

of the desired company: i.e. the user would enter an 'F' (in the blank space under the company button), followed by an 'e,' which would automatically display companies whose names begin with 'Fe'. This would highlight Fermco Industries Ltd. and display all available building systems that this company uses in home manufacturing, in this case only panelised wall construction (*Panneaux usinés et composants*).

5.4.2.4.2 Search by Building System within the Systems Part

The second example of searching for a prefabricated home within the systems part of the catalogue mode, involves looking for a specific building system. A complete list of building systems is given in Table 5.1 List of prefabricated housing types. The demonstration software tool displays only one active building system (as shown in Table 5.5 Tabulation of entries in system indices), which is panelised wall construction (*Panneaux usinés et composants*). Therefore in this example, the user can only select panelised construction, and Fermco Industries Ltd. is the only manufacturer of that system (Figure 5.10). The original intention was to make other systems available for browsing by giving one example of each system. For example, a model manufactured by a certain company could have been an example of a building type such as a log-profiled home.

5.4.2.4.3 Results of Both Search Methods: List of Models

By either searching by company name (as in section 5.4.2.4.1) or by type of building system (as in section 5.4.2.4.2), the user chooses both a company and a building system (the order determined by the method of search) and is given a list of models built by a selected company of a specific building system. In this case, the Next Home™ (*Maison Redécouverte*) is the

only model available built by the selected company, Fermco Industries Ltd., and of the selected building system type – that is panelised construction or factory built panels (*Panneaux usinés et composants*, Figure 5.10). This model can be selected, and thereby added to the 'shopping list' using the *liste* function (explained in section 5.4.2.6 Adding to the List Function), for later use when customising a house in the Purchasing Mode, or *achat* (section 5.4.3).

5.4.2.5 Examples of Searching within the Products Part

In this section, three different products will be selected using three different search methods. The procedure is similar to that of the services part, however the indices used are different reflecting the more specific and varied structure of organisation used for building products.

5.4.2.5.1 Search by Company within the Products Part

The first example demonstrates how to search for a desired building product using the company index (Table 5.8a shows the information in the products part arranged alphabetically by company name). The user must select the product part (*produits*) of the catalogue mode (*catalogue*). In this example, it is assumed that the user is searching for a certain company which manufactures specialised toilet equipment. The user can't remember the full name of the company but knows that the first letter of its name is 'G'. The user can either click on the company index button (*compagnie*) and scroll through the alphabetical list of company names, or can begin to type the company name in the blank window, located underneath the company index button (*compagnie*) and above the company index window. If the user types a 'g' or 'G', they will access the company profile of Geberit, which in this case is the desired company (Figure 5.11). Similarly, if the user types 'gr' or 'Gr', they will access the company profile of

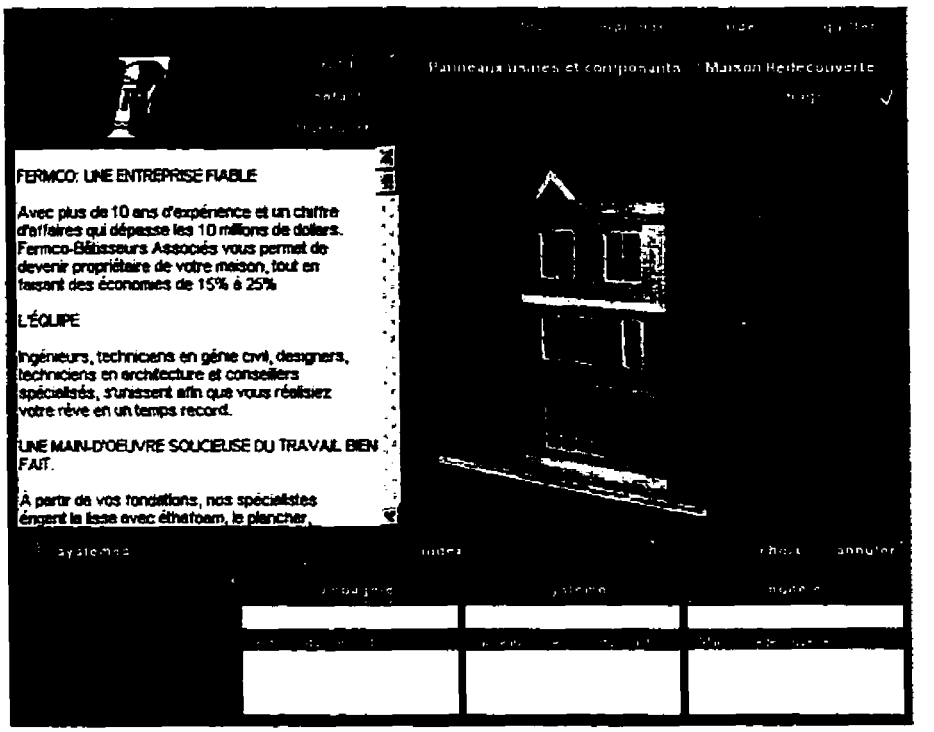


Figure 5.10 Example of a company profile within the systems part

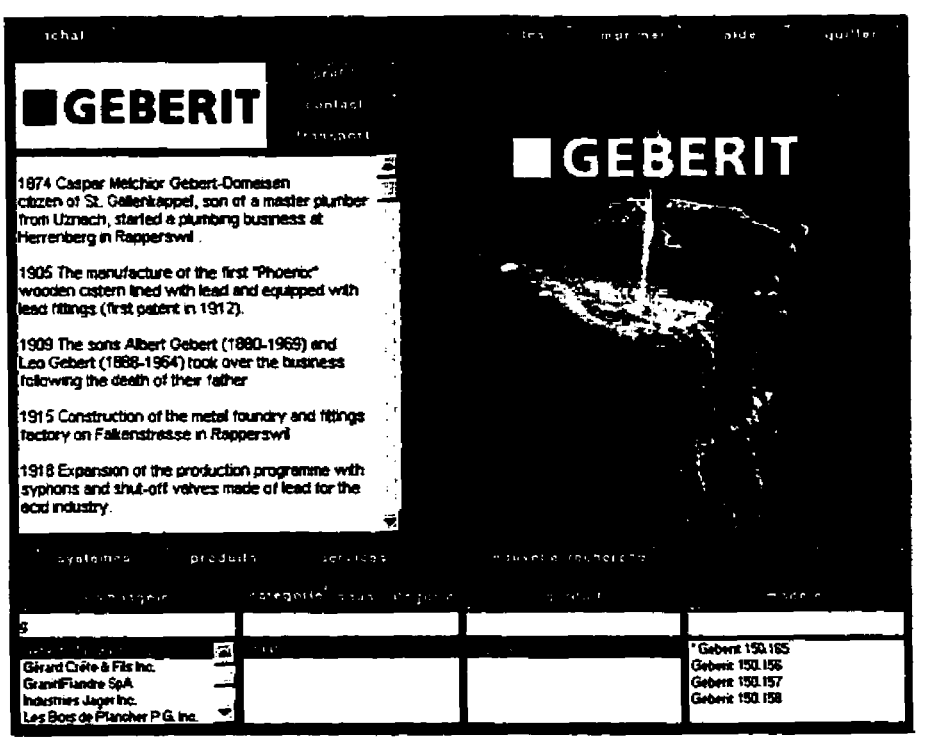


Figure 5.11 Example of a company profile within the products part

compagnie	sous-catégorie	produit	modèle
B.P.C.O. Inc.	07311 bardeau d'asphalte	bardeau	Vert Forêt (B.P.C.O.)
Benjamin Moore & Cie Ltée.	09920 peinture interieure	latex-interieure	Latex Regal Wall Satin (215)
Edge Hardware Inc.	08700 quincaillerie	poignée	Suzuka
Electroménagers Sans Frontières	11451 équipement de cuisine	four multi-fonction	St-George VE0 7C5
Forbo Industries Inc.	09650 revêtement de sol résilient	revêtement de sol linoleum	Marmoleum 3844 Jade
Gérard Crête & Fils Inc.	06101 bois d'œuvre	bois de construction	2" x 2" x 8'
Geberit Manufacturing Inc.	15445 W.-C.	trop-plein	Geberit 150.165
GranitiFiandre SpA	09310 carreaux de céramique	carreaux de céramique	AT036 Blue Bay
Industries Jager Inc.	06151 assemblage de poutrelles	poutrelle ajourée	Spacejoist^{MD}
Les Bois de Plancher P.G. Inc.	09550 plancher en bois	lamelle de bois franc	2-1/4" x 25/32" (57 x 19mm)
Les Industries Melco Ltée.	08630 fenêtres en vinyle	fenêtres à battant	T2V-0906 35-9/16" x 23-5/8"
Les Rangement Idées-Range Inc.	12600 mobilier et accessoires	meubles de rangement	Rangement 001
Matériaux Caseades Inc.	09530 isolation et écrans acoustique	panneau acoustique	Panneau Sonopan 4' x 4'
Sarnafil Inc.	07500 couvertures à membrane	membrane	Membrane Sarnafil S 327-12
Uniboard Canada Inc.	09700 revêtements de sol spéciaux	couvre-plancher laminé	Érable Forêt
Westroc Inc.	09111 panneaux de gypse	panneau de gypse	W-1001
Wiremold Canada Inc.	16110 canalisations	prise electrique	Access 5000

Table 5.8a Tabulation of entries in product indices (*produits*) according to company name (*compagnie*); index of MasterFormat Divisions, *catégorie*, omitted for clarity.

GranitiFiandre, another company which is part of the database. This text entry feature can be useful for gaining direct access to the desired company's profile by typing the first few letters of the company's name, as opposed to scrolling through the complete list of company names.

Once the user is in the company profile of Geberit, they can access contact and transportation information (using the *contact* and *transport* buttons respectively), as well as the company history as seen previously in the systems part of the catalogue mode (section 5.4.2.4.1). Similarly, once a model is selected from the appropriate MasterFormat sub-division (in this case the Geberit 150.165 overflow, trop-plein, from 15445 W.-C.), an image and technical specifications of that model are displayed.

5.4.2.5.2 Search by MasterFormat (Sub-)Division within the Products Part

The second example will show how the user can locate a building product by searching through the MasterFormat Division and Sub-division headings (Table 5.8b shows the information in the products part arranged numerically by MasterFormat Sub-divisions). It will be assumed that the user is looking for vinyl windows. In order to perform a new search and discard the information from the previous example, the user clicks on the *nouvelle recherche* button, then clicks on the MasterFormat Division button (*catégorie*) to display a full list of all the MasterFormat Divisions (Figure 5.12 and Table 5.9). When each of the individual MasterFormat Divisions is selected, a list of companies that manufacture products from that division are displayed. If the MasterFormat Sub-division button (*sous-catégorie*) is clicked on, all the active sub-divisions within the selected division are displayed and the user can toggle between the individual division or a list of associated sub-divisions (Table 5.10). For example, if division 06 Woods & Plastics (*Bois et Plastique*) is selected, Industries Jager Inc.

sous-catégorie	produit	compagnie	modèle
06101 bois d'œuvre	bois de construction	Gérard Crête & Fils Inc.	2" x 2" x 8'
06151 assemblage de poutrelles	poutrelle ajourée	Industries Jager Inc.	Spacejoist[MD]
07311 bardeau d'asphalte	bardeau	B.P.C.O. Inc.	Vert Forêt (B.P.C.O.)
07500 couvertures à membrane	membrane	Sarnafil Inc.	Membrane Sarnafil S 327-12
08630 fenêtres en vinyle	fenêtres à battant	Les Industries Melco Ltée.	T2V-0906 35-7/16" x 23-5/8"
08700 quincaillerie	poignée	Edge Hardware Inc.	Suzuka
09530 isolation et écrans acoustique	panneau acoustique	Matériaux Cascades Inc.	Panneau Sonopan 4' x 4'
09111 panneaux de gypse	panneau de gypse	Westroc Inc.	W-1001
09310 carreaux de céramique	carreaux de céramique	GranitiFiandre SpA	AT036 Blue Bay
09550 plancher en bois	lamelle de bois franc	Les Bois de Plancher P.G. Inc.	2-1/4" x 25/32" (57 x 19mm)
09650 revêtement de sol résilient	revêtement de sol linoleum	Forbo Industries Inc.	Marmoleum 3844 Jade
09700 revêtements de sol spéciaux	couvre-plancher laminé	Uniboard Canada Inc.	Érable Forêt
09920 peinture interieure	latex-interieure	Benjamin Moore & Cie Ltée.	Latex Regal Wall Satin (215)
11451 équipement de cuisine	four multi-fonction	Electroménagers Sans Frontières	St-George VE0 7C5
12600 mobilier et accessoires	meubles de rangement	Les Rangement Idées-Range Inc.	Rangement 001
15445 W.-C.	trop-plein	Geberit Manufacturing Inc.	Geberit 150.165
16110 canalisations	prise electrique	Wiremold Canada Inc.	Access 5000

Table 5.8b Tabulation of entries in product indices (*produits*) according to MasterFormat Sub-divisions (*sous-catégorie*)

Distribution des Categories des Produits	
catégorie	**sous-catégorie**
02 Aménagement de l'Émplacement	
03 Béton	
04 Maçonnerie	
05 Métaux	
06 Bois et Plastique	06101 bois d'œuvre
	06151 assemblage de poutrelles
07 Isolation et Étanchéité	07311 bardeau d'asphalte
	07500 couvertures à membrane
08 Portes et Fenêtres	08630 fenêtres en vinyle
	08700 quincaillerie
09 Finition	09111 panneaux de gypse
	09310 carreaux de céramique
	09530 isolation et écrans acousitque
	09550 plancher en bois
	09650 revêtement de sol résilient
	09700 revêtements de sol spéciaux
	09920 peinture interieure
10 Produits Spéciaux	
11 Équipement	11451 équipement de cuisine
12 Ameublement	12600 mobilier et accessoires
13 Installations Spéciales	
14 Systèmes Transporteurs	
15 Mécanique	15445 W.-C.
16 Électricité	16110 canalisation

Table 5.10 List of MasterFormat Divisions with active MasterFormat Sub-divisions

and Gérard Crête & Fils Inc. will appear in the company index window, while clicking on the MasterFormat Sub-division button (*sous-catégorie*) displays the two active sub-divisions within division 06 Woods & Plastics (*Bois et Plastique*): they are 06101 Construction Lumber (*bois d'œuvre*) and 06151 Prefabricated Wood Trusses (*assemblage de poutrelles*). The same can be done for each MasterFormat Division, which is useful for searching for products of an unknown MasterFormat sub-division. For example, when searching for a type of flooring it is useful to look through all the sub-divisions of Division 09 Finishes (*Finition*) to view all available choices for interior finishing products. In this software tool, a few of the MasterFormat Divisions do not contain any products or companies (as can be seen in Table 5.10).

Now we shall return to the search for vinyl windows. The user selects MasterFormat Division 08 Doors & Windows (*Portes et Fenêtres*) and a list of companies within that division appears. Since the user is not familiar with any of these companies, they can click on the MasterFormat Sub-divisions button (*sous-catégorie*) to view a list of all the sub-divisions within 08 Doors and Windows. Once the desired sub-division is selected, in this case 08630 Vinyl Windows (*fenêtres en vinyle*), only the companies that produce items in this specific sub-division remain in the company index window. Les Industries Melco Ltée. is the only company entered in the demonstration software that manufactures vinyl windows, so the user is directed to that company's profile (Figure 5.13). Casement windows (*fenêtres à battant*) are the only product type offered by this company in the vinyl window category. Again, a list of models is given with only the first, asterixed model being active, in this case model number T2V 0906, which is a casement window in vinyl of dimensions 35-7/26" by 23-5/8" (Figure 5.14). If the user clicks on the technical specifications and details button (*détails*), they can view the associated information (in this case certain physical properties are described) relating to the selected model (Figure 5.15).

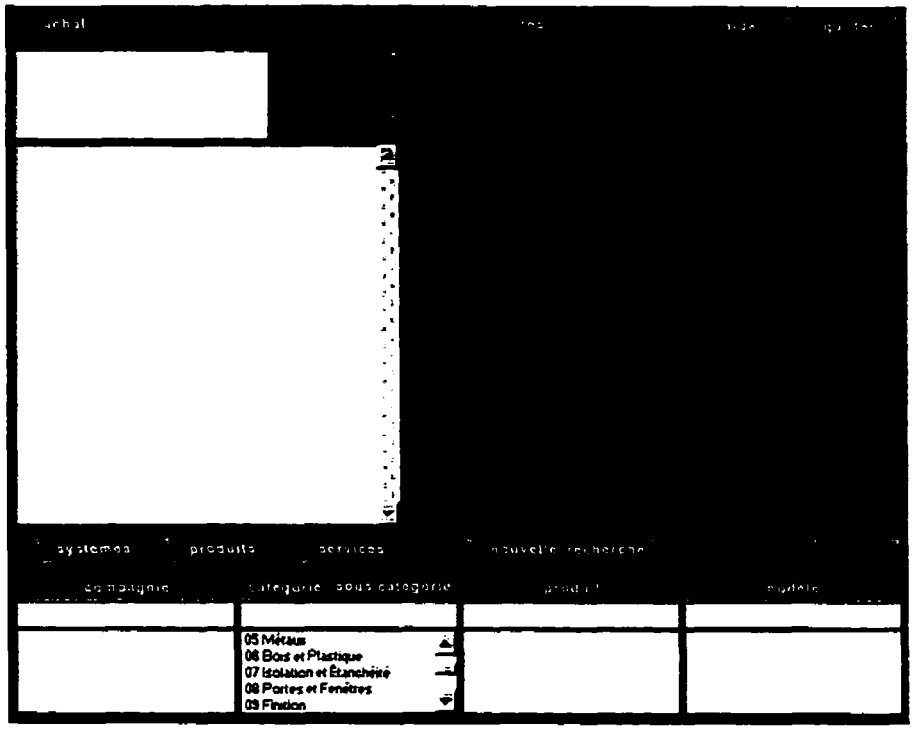


Figure 5.12 Index of the MasterFormat Divisions

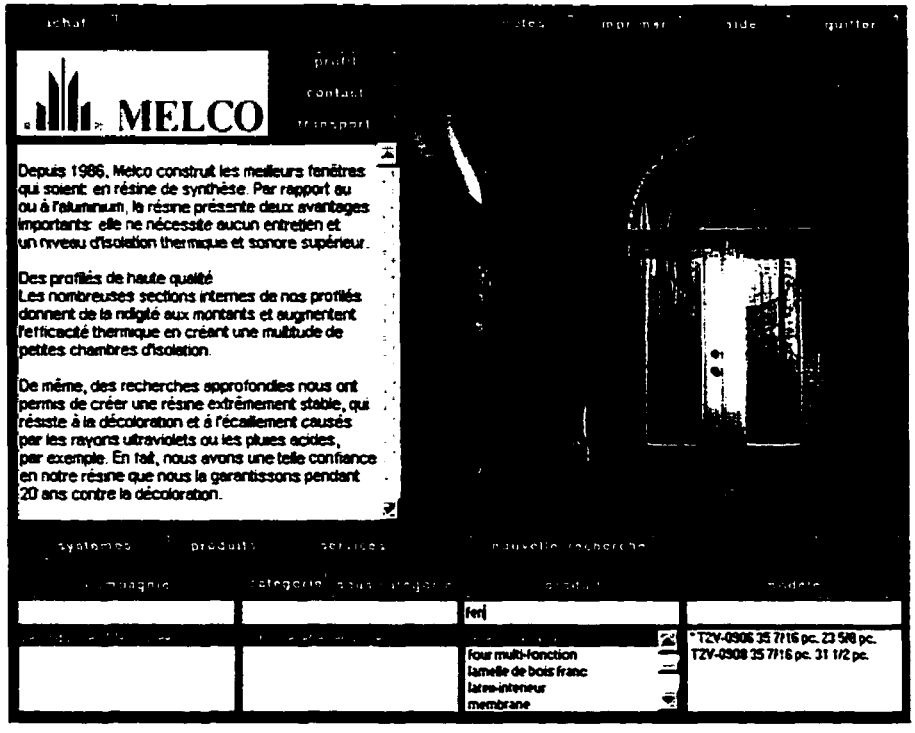


Figure 5.13 Company profile of vinyl window manufacturer

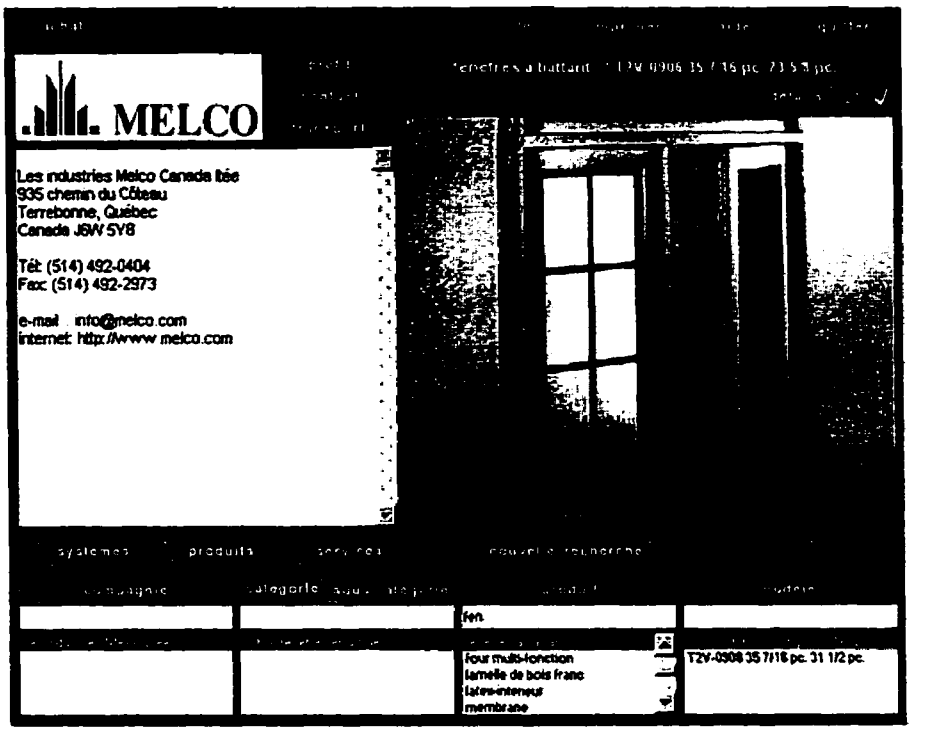


Figure 5.14 Example of a specific model of vinyl windows

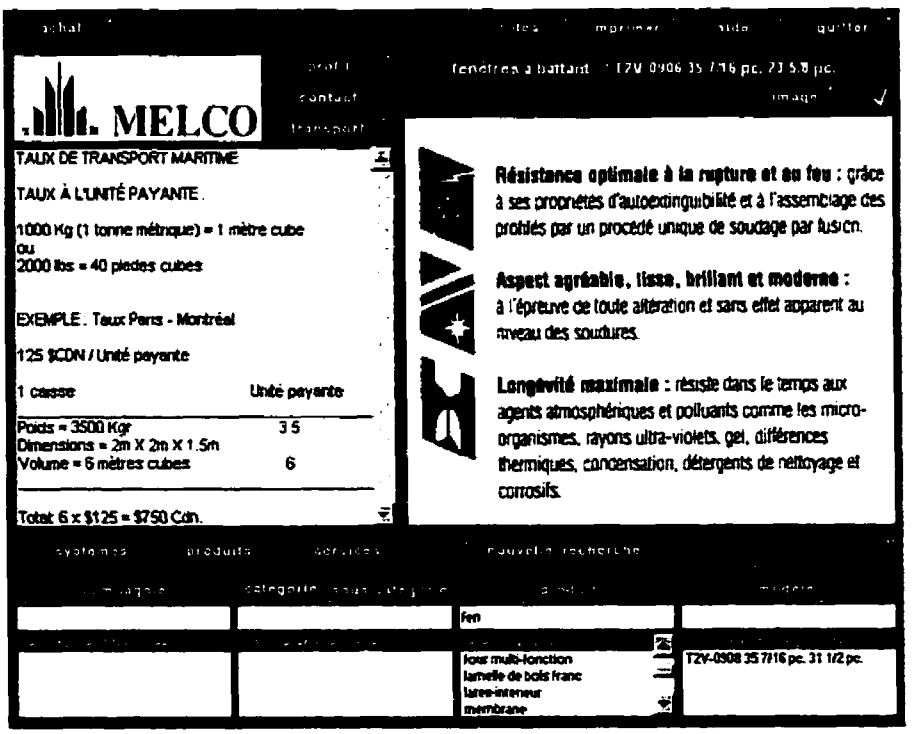


Figure 5.15 Technical specifications for selected model of vinyl window

5.4.2.5.3 Search by Building Product Type within the Products Part

The third and last example of searching for a building product in the products part of the catalogue mode involves a search by product type. A complete alphabetical list of building product types, available in the products part of the demonstration software is shown in Table 5.8c. In this example, it is assumed that the user is looking for ceramic floor tiles. The first approach could be to search the MasterFormat Division and Sub-division indices (as was demonstrated in section 5.4.2.5.2 Search by MasterFormat Division or Sub-division within the Products Part). It is assumed that the user does not know which MasterFormat Division or Sub-division contains, ceramic floor tiles. After clicking on the *catégorie* button, the user scrolls through the MasterFormat Divisions index and guesses that ceramic floor tiles are categorised in Division 09 Finishes. After clicking on that division, the index of MasterFormat Sub-divisions within Division 09 Finishes is displayed. Since this list would be rather long and unfamiliar to the user, an alternate search method would be more useful.

The user performs a new search (by clicking on the *nouvelle recherche* button), then clicks on the building product button (*produit*) for a list of all building products. To locate ceramic tiles, the user can begin to type in 'ceramic floor tiles' (*carreaux de céramique*). As soon as the 'c' is entered, the building product named *carreaux de céramique* is highlighted, since it is the first building product beginning with the letter 'c'. The user clicks on *carreaux de céramique* for a list of all the companies that manufacture or distribute ceramic floor tiles (in this case the software displays only one company, GranitiFiandre, Figure 5.16). Furthermore, once the building product has been selected by clicking on the building product name, (*carreaux de céramique*), the corresponding MasterFormat Division and Sub-division of that building

produit	sous-catégorie	compagnie	modèle
bardeau	07311 bardeau d'asphalte	B.P.C.O. Inc.	Vert Forêt (B.P.C.O.)
bois de construction	06101 bois d'œuvre	Gérard Crête & Fils Inc.	2" x 2" x 8'
carreaux de céramique	09310 carreaux de céramique	GranitiFiandre SpA	AT036 Blue Bay
couvre-plancher laminé	09700 revêtements de sol spéciaux	Uniboard Canada Inc.	Érable Forêt
fenêtres à battant	08630 fenêtres en vinyle	Les Industries Melco Ltée.	T2V-0906 35-7/16" x 23-5/8"
four multi-fonction	11451 équipement de cuisine	Electroménagers Sans Frontières	St-George VE0 7C5
lamelle de bois franc	09550 plancher en bois	Les Bois de Plancher P.G. Inc.	2-1/4" x 25/32" (57 x 19mm)
latex-interieure	09920 peinture interieure	Benjamin Moore & Cie Ltée.	Latex Regal Wall Satin (215)
membrane	07500 couvertures à membrane	Sarnafil Inc.	Membrane Sarnafil S 327-12
meubles de rangement	12600 mobilier et accessoires	Les Rangement Idées-Range Inc.	Rangement 001
panneau acoustique	09530 isolation et écrans acoustique	Matériaux Cascades Inc.	Panneau Sonopan 4' x 4'
panneau de gypse	09111 panneaux de gypse	Westroc Inc.	W-1001
poignée	08700 quincaillerie	Edge Hardware Inc.	Suzuka
poutrelle ajourée	06151 assemblage de poutrelles	Industries Jager Inc.	Spacejoist^{MD}
prise electrique	16110 canalisations	Wiremold Canada Inc.	Access 5000
revêtement de sol linoleum	09650 revêtement de sol résilient	Forbo Industries Inc.	Marmoleum 3844 Jade
trop-plein	15445 W.-C.	Geberit Manufacturing Inc.	Geberit 150.165

Table 5.8c Tabulation of entries in product indices (*produits*) according to building products (*produit*)

product is displayed in the division (*catégorie*) and sub-division (*sous-catégorie*) index windows. This example demonstrates how using the building product index can simplify looking for specific building products of an unknown MasterFormat classification.

5.4.2.6 Adding to the List Function

In this section, the previously chosen examples of building products will be used as examples to demonstrate how items can be selected from the catalogue and added to a 'shopping list' using the list function (*liste*). As soon as a system, product or service (from a specific company) has been selected from the catalogue mode, a list of either prefabricated housing models, building product models or services (in that order), is displayed. When one of these prefabricated housing models, building product models or services is highlighted (by clicking on the name in the index window), three buttons above the graphics window on the right hand side of the screen become active. They are the details and specifications button (*détails*), the graphic magnification button (an icon of a magnifying glass) and the product selection button (a check mark). It is the last of these three functions that will be described in this section. When clicked on, the details button will display various technical details and specifications about the selected building product as provided by the manufacturer. The graphic magnification button enlarges the product image to fit the entire application screen, to display the product image at a size of 640 by 480 pixels.

The product selection button allows the user to compile a 'shopping list' in each of the three parts of the catalogue mode. In other words, the systems, products and services parts of the catalogue mode each have a separate list for adding selected items. As indicated previously, the product selection button only becomes active once a prefabricated housing model, building product model or service has been selected in one of the systems, products and services parts.

To select a prefabricated housing model, building product model or service, the user must click on the active check mark button. As soon as the first item has been added to the list, the list button (*liste*) becomes active and is highlighted. This happens independently for each of the three parts of the catalogue mode – if a prefabricated housing model is added to the list in the systems part, the list button will only appear highlighted in the systems part and not in either the products or services parts until an item has been added to the list of one of those parts.

The user can add as many items as they choose to the list and can access the list for each part any time they are working in a part. To do so, the user clicks on the list button; for example in the products part, the list of selected building product models appears and the list button is replaced by an index button (*index*) which allows the user to leave the list function and return to searching within the catalogue mode. If the user clicks on any of the model names in the model index window, the product information and company profile of that selected model will appear (Figure 5.17). All of the models selected to the list can be viewed in this way. Clicking on the index button allows the user to browse for other products. While in the list function, the user can view the lists of each of the other parts of the catalogue mode by clicking on the desired part button, e.g. when looking at the list of building product models created in the products part, the user can view the list of prefabricated housing models selected from the systems part by simply clicking on the systems button (*systèmes*).

5.4.3 Purchasing Mode

The purchasing mode can be entered through the introduction screen or any time when browsing through the catalogue, by clicking on the purchasing mode button (*achat*), which is located in the top left corner of the screen. This button allows the user to toggle between the catalogue mode and the purchasing mode, so the button will always display the mode that is

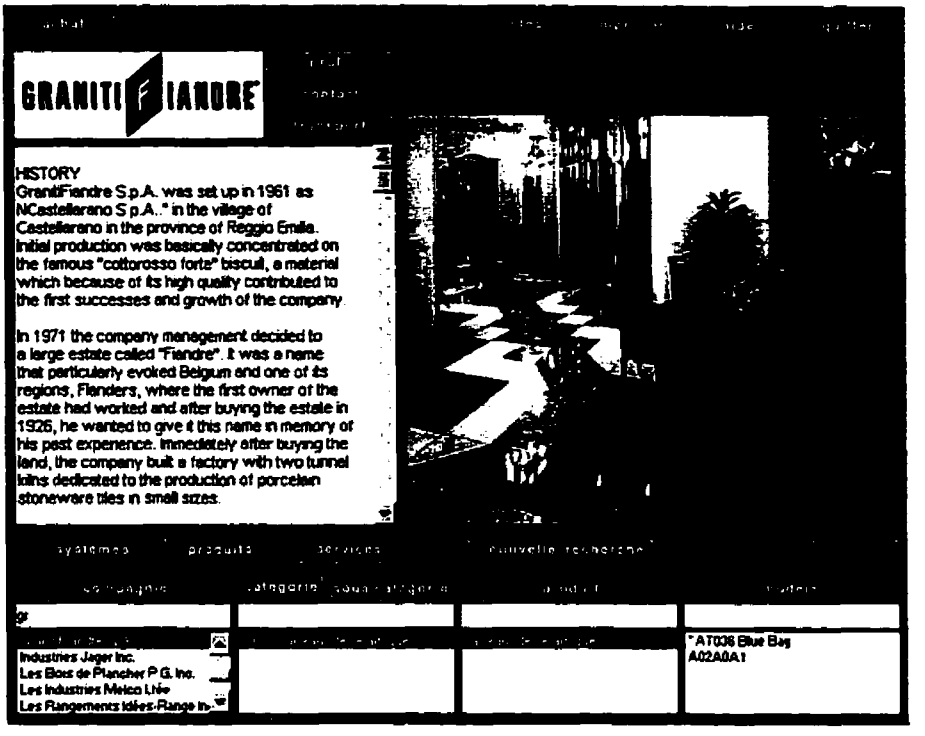


Figure 5.16 Result of search for ceramic tile manufacturer

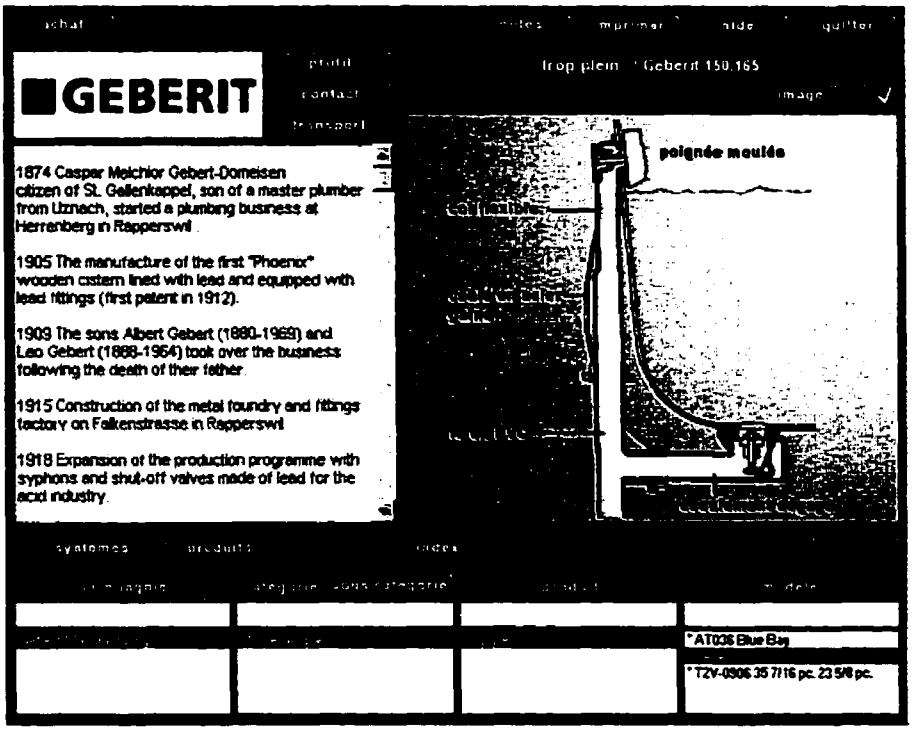


Figure 5.17 Compilation of different products using the list function

not in use. These two methods of entry into the purchasing mode relate to two distinct and different intentions by software users.

5.4.3.1 Entering the Purchasing Mode

The first method of accessing the purchasing mode (by clicking on the purchasing mode button from the introduction screen) would most likely be undertaken by users familiar with the software who are looking primarily for interest in a prefabricated housing unit that they intend to customise. When the purchasing mode button is clicked, the blank screen of the purchasing mode appears (Figure 5.18). The user selects a prefabricated housing model by clicking on the model selection button (*modèle*), which temporarily takes them to the catalogue mode where only the systems part is active. The products and services parts can only be used by returning to the proper catalogue mode. The user can browse through either the company, system or model indices (as explained previously with the systems part of the catalogue mode in section 5.4.2.4) to select a model of a prefabricated housing unit. Any number of these models can be added to the list using the select item button (*liste*) or similarly retrieved from there for use in the purchasing mode. Whenever the user is looking at a specific model (in the systems part of this partial catalogue mode) the choose button (*choix*) becomes active and highlighted, allowing the user to select that model for customisation within the purchasing mode, becomes highlighted or active.

The second method of entering the purchasing mode for users who are unfamiliar with either the software programme or the models listed in the catalogue is achieved by browsing through the systems part of the catalogue mode and finding the desired prefabricated house model. Once the desired model has been chosen (the user has either added that model to the list or highlighted that model so that it appears on the screen), the user can click on the purchasing

mode button (*achat*). The blank screen of the purchasing mode will appear, as in the first method of entering the purchasing mode. However ,when the model selection button (*modèle*) is clicked so that the user can enter the systems part of the partial catalogue mode and choose a prefabricated housing unit, the previously highlighted model appears on the screen and the choose button (*choix*) becomes active. Similarly, if a list was compiled previously in the systems part of the catalogue mode. the user can select one of those housing unit models for customisation in the purchasing mode. The user can un-select and re-select different models using the cancel (*annuler*) and choose (*choix*) buttons respectively.

5.4.3.2 Choosing Options for the Selected Housing Unit

At this stage the user has chosen a prefabricated housing model for customisation from the options part of the purchasing mode. This function can be started by clicking on the options button (*options*), which becomes active once the user has selected a housing model using the model selection and choose buttons. The only active model in the systems part of the demonstration software programme is the Next Home™ (*Maison Redécouverte*), so that model will be used as the example to demonstrate the options available for customisation of a prefabricated housing unit (Figure 5.19).

The main series of options (using the *options* button) relate to the exterior features of the house as shown in Table 5.11. These options relate specifically to the Next Home™ (*Maison Redécouverte*) and would be different to the individual requirements of each prefabricated model offered by a variety of companies that manufacture factory-built homes. In many cases, companies offer models that have very little flexibility in terms of exterior features so that they can mass-produce them more efficiently without spending time on customisation. In addition, certain options may be invalid: for example, if the user selects an on-grade unit with the main

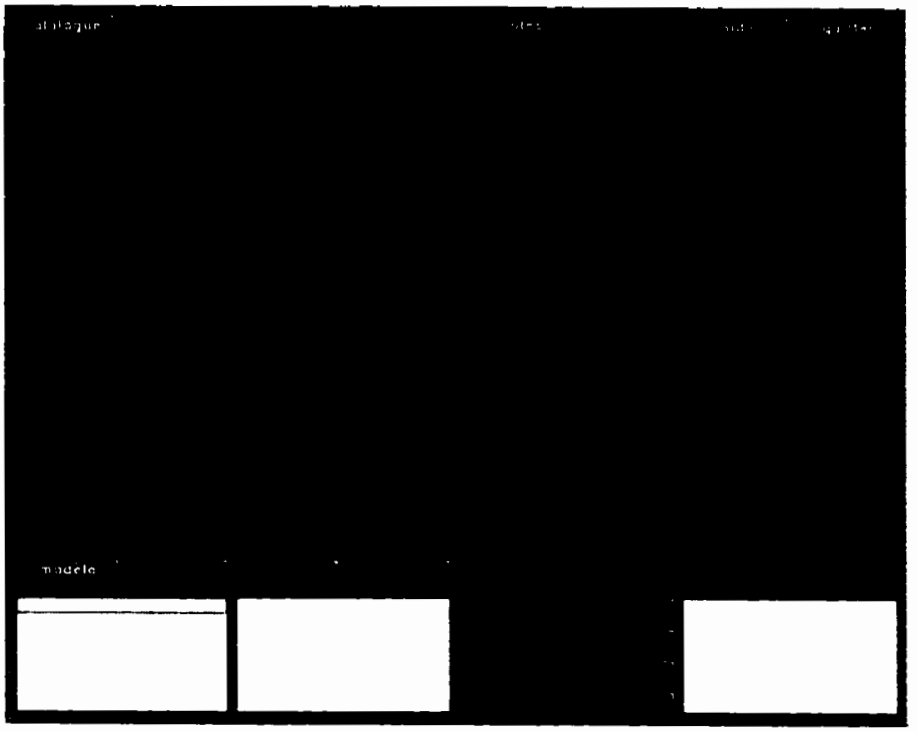


Figure 5.18 Screen layout of the purchasing mode

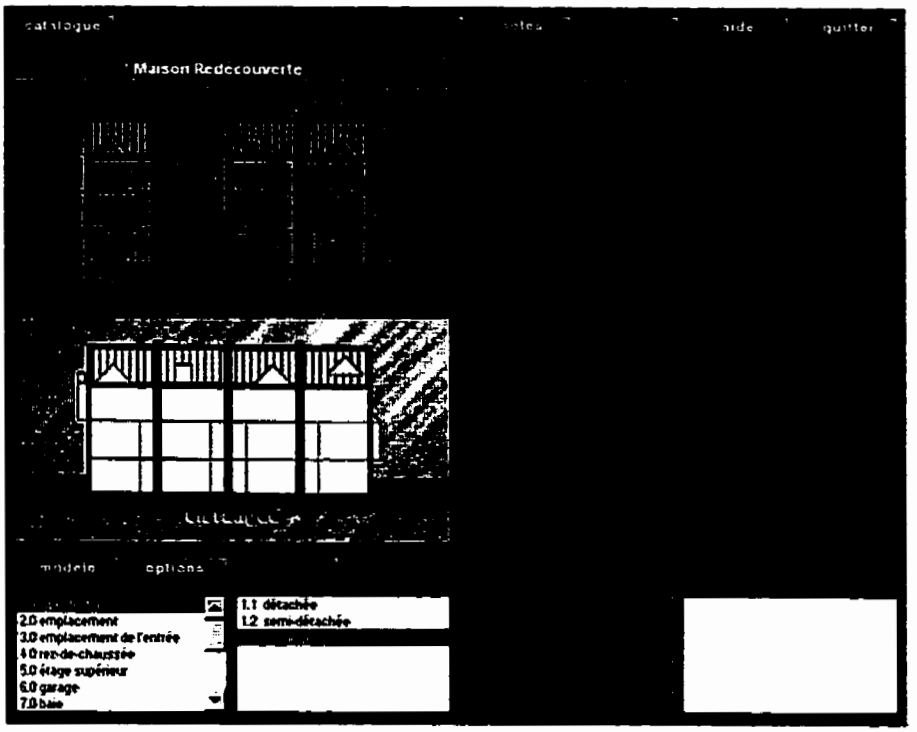


Figure 5.19 Selected housing unit to be customised

compagnie	Fermco Industries Ltd.	
système	Panneaux usinés et composants	
modèle	Maison Redécouverte	
1.0 type de maison	1.1 détachée	
	1.2 semi-détachée	
	1.3 en rangée	
2.0 emplacement	**2.1 unité de gauche**	
	2.2 unité de droite	
	2.3 unité du milieu	
3.0 emplacement de l'entrée	**3.1 côté droit**	
	3.2 côté gauche	
4.0 rez-de-chausée	**4.1 niveau du sol**	
	4.2 sous-sol	
5.0 étage supérieur	**5.1 mézzanine**	
	5.2 vide sanitaire de grenier	
	5.3 plafond cathédrale	
6.0 garage	6.1 au sous-sol	
	6.2 aucune	
7.0 baie	7.1 endroit de la baie	7.1.1 aucune
		7.1.2 2ième étage
		7.1.2 3ième étage
		7.1.2 2ième et 3ième étage
	7.2 toiture de la baie	7.2.1 en pente
		7.2.2 incliné
		7.2.3 en voûte
8.0 élément du toit	8.1 type d'élément	8.1.1 aucun
		8.1.2 en pente
		8.1.3 carré
	8.2 taille	8.2.1 petit
		8.2.2 grand
	8.3 emplacement	**8.3.1 à gauche**
		8.3.2 au milieu
		8.3.3 à droite
9.0 occupation	**9.1 triplex**	
	9.2 duplex A	
	9.3 duplex B	
	9.4 unifamilial	
10.0 bureaux à domicile	**10.1 aucun**	
	10.2 rez-de-chaussée	
	10.3 2ième étage	

Table 5.11 List of exterior features which can be customised using the option function. *options*

entrance on the ground floor, it is not possible to also choose a garage for that unit (Figure 5.20).

Once all the exterior features of the house have been chosen, the software can determine the final specifications for the entire building, such as the number of floors, the occupancy and the location of bays and dormers. These options all have implications affecting the interior layout of the building and must be determined before the user can choose between interior plans. As soon as the option function is complete, the interior plans (*plans*) and details (*détails*) functions become active with their corresponding buttons becoming highlighted (Figure 5.21).

Through the former function, the software offers the user a choice of layouts for each floor of the building (using the interior plans button, with each plan relating to the occupancy and features selected for that specific unit). For example, if the user selects a single-family dwelling with the entrance on the left side of the first floor of a unit with a basement, the floor plan options available will reflect the nature of this storey with all of its unique features. All the floor plan options will show the front door on the left side with the stairwell on the right without any stair enclosure wall, due to the nature of the building's selected occupancy (i.e. a single family house will have an open stairwell), and so on. In this example, the Next Home™ offers the user three different layouts for each of the four floors of the building (Table 5.12). These plans were drawn on AutoCAD® and can be easily updated by the manufacturer to offer any additional layouts of customisation possibilities (Figures 5.22, 5.23 and 5.24).

The second function allows the user to select specific details. Clicking on the details button (*détails*) displays a menu of different elements of the house that have been specifically selected by the manufacturer as those which can be modified or have their products exchanged. This function provides the principle link between the purchasing and catalogue modes, with respect to the selection or customisation of individual building products used in the construction of the

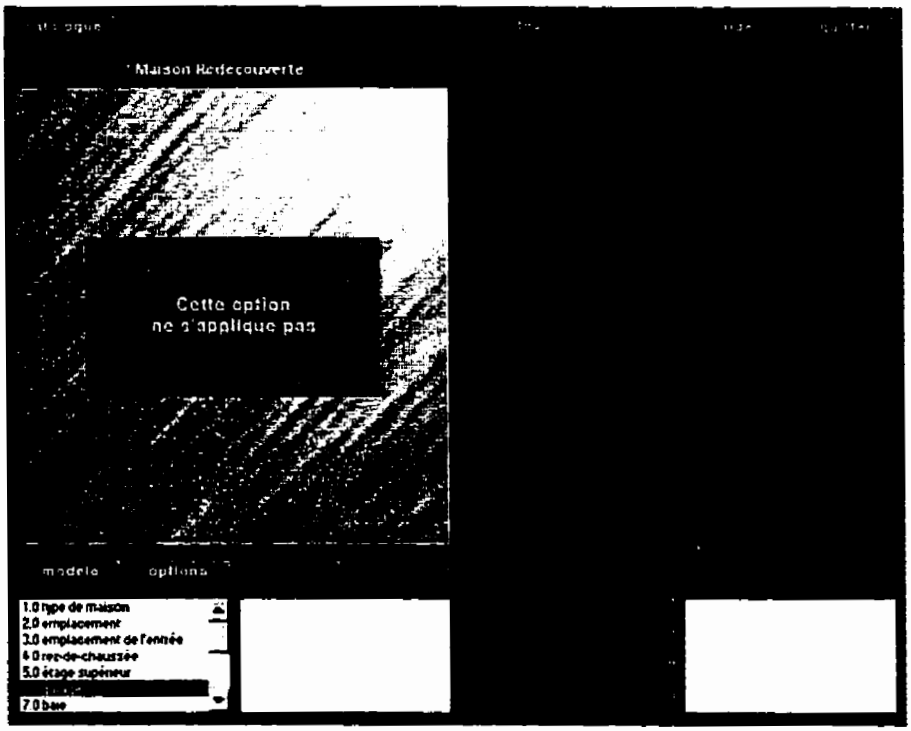


Figure 5.20 Message to indicate inapplicability of potential option

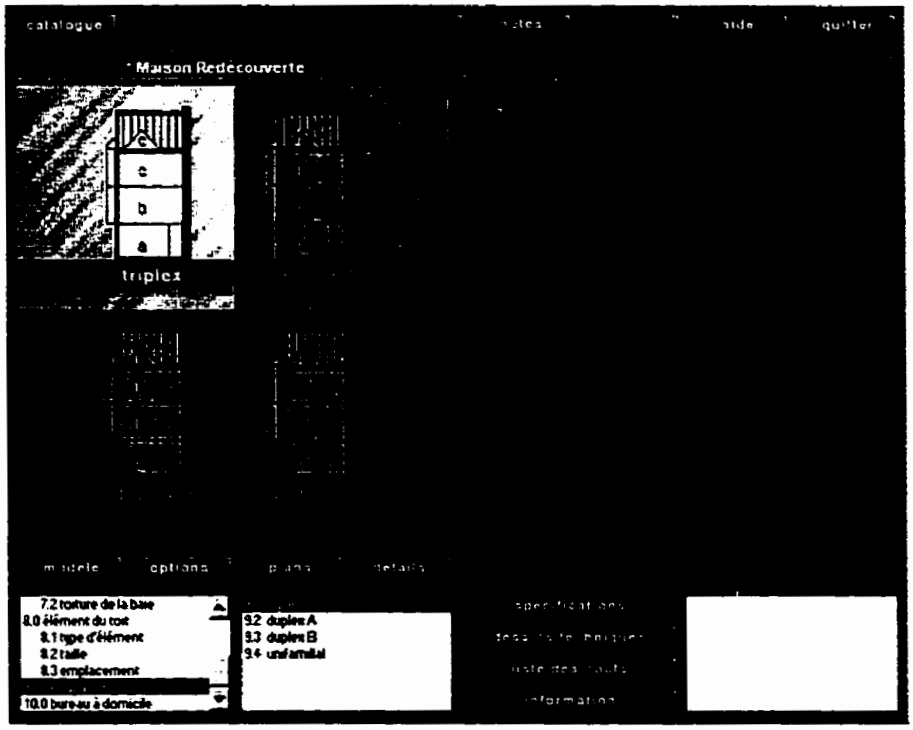


Figure 5.21 Example of available exterior features

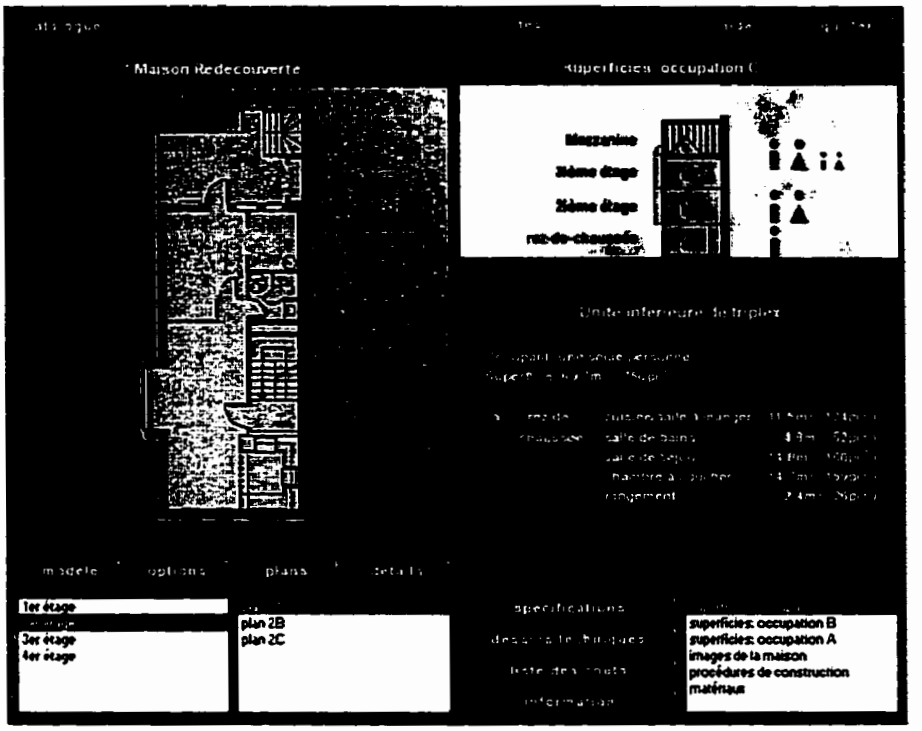


Figure 5.22 Floor plan options and summary of selected exterior features

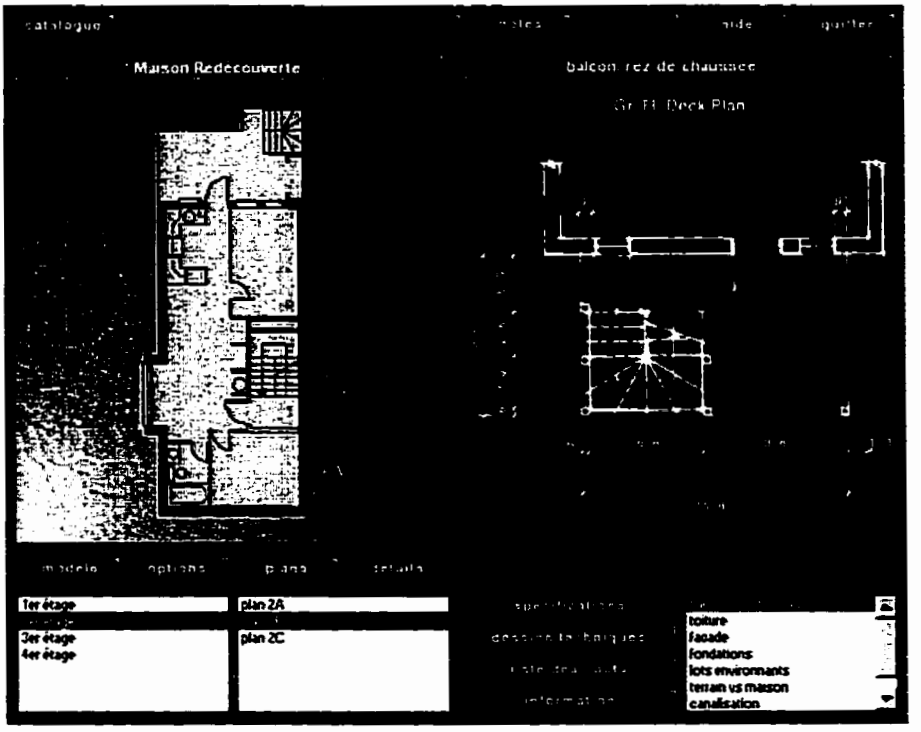


Figure 5.23 Floor plan options and construction drawing of exterior feature

prefabricated home. The example of the Next Home™ shows only one example, with a list of other possible user-selected details; the main exterior door can be chosen from a given door manufacturer, les Industries Melco Canada ltée., who provides a list of appropriate choices the user can select as desired (Figure 5.25). Table 5.12 gives the other details that can be offered to the user for customisation.

There are four other functions that also become active once the selection of the exterior features has been completed: specifications (*spécifications*), technical drawings of specific construction details (*dessins technique*), costing summaries (*liste des coûts*) and general information on the housing unit (*information*), in this case the Next Home™ (Figure 5.25). Table 5.13 lists the available and active categories within each of these four functions. The specifications function gives a summary of the building (i.e. the selected exterior features and occupancy) as well as floor areas for all of the rooms on each of the floors (Figure 5.22). The technical drawings section shows a construction drawing of the ground-floor balcony (Figure 5.23). The costing section shows a summary of the overall pricing structure of the building. This section can be expanded to include cost summaries for a variety of different breakdowns, such as site preparation and foundation work, electrical and mechanical services and structure (Figure 5.24). These costing analyses would be integrated with the option functions so that the addition or exchange of features, such as a bay window or a different front door, would be appropriately accounted for in the cost breakdown.

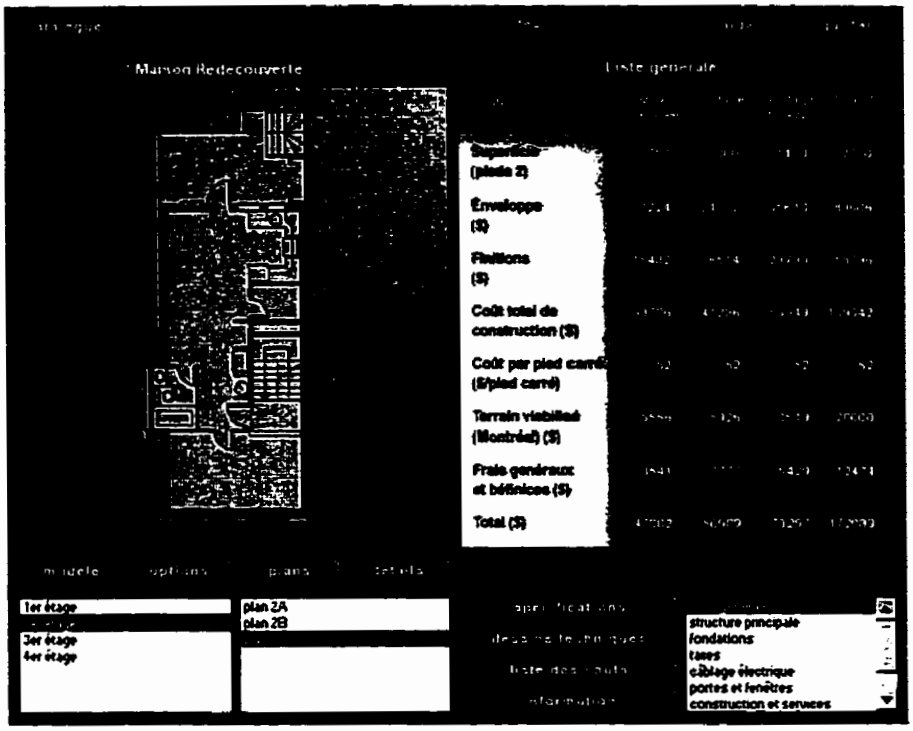


Figure 5.24 Floor plan options and cost breakdown summary

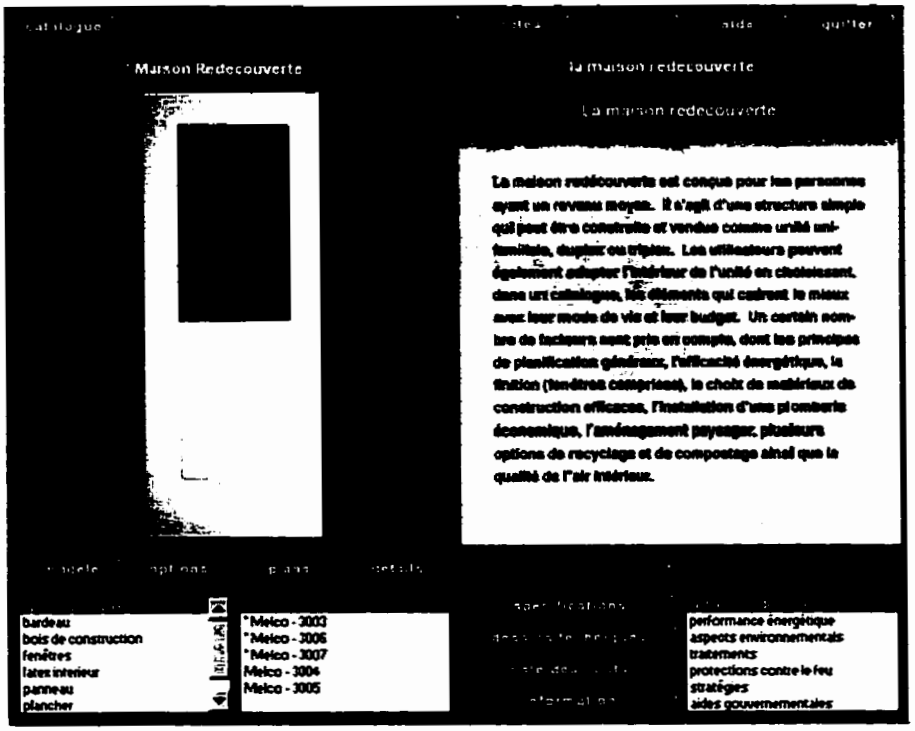


Figure 5.25 Option to select alternate details from the catalogue mode

plans	
1er étage	plan 1A
	plan 1B
	plan 1C
2ième étage	plan 2A
	plan 2B
	plan 2C
3ième étage	plan 3A
	plan 3B
	plan 3C
4ième étage	plan 4A
	plan 4B
	plan 4C

détails	
bardeau	
bois de construction	
fenêtres	
latex intérieur	
panneau	
plancher	
portes principales	**Melco-3002**
	Melco-3003
	Melco-3004
	Melco-3005
	Melco-3006
	Melco-3007
prises electrique	

Table 5.12 Choices available using the floor plan option function (*plans*) and the details function (*détails*)

spécifications
superficies: occupation C
superficies: occupation B
superficies: occupation A
images de la maison
procédures de construction
matériaux

dessins techniques
balcon: rez-de-chaussée
toiture
façade
fondations
lots environnants
terrain vs maison
canalisation
design intérieur

liste des coûts
Liste générale
structure principale
fondations
taxes
câblage electrique
portes et fenêtres
construction et services
maintenance
assurances

information
la maison redécouverte
performance énérgetique
aspects environnementals
traitements
protection contre le feu
stratégies
aides gouvernementales

Table 5.13 Lists of specifications (*spécifications*), technical drawings (*dessins techniques*), cost analyses (*liste des coûts*) and related information (*information*) displayed in the purchasing mode

CHAPTER SIX: CONCLUSION

6.1 Applicability

A software tool, as proposed in Chapter 5, can be a very useful application for prefabricated home manufacturers. Such companies can benefit tremendously from this software by engaging in commercial activity on the Web. Even without such a specialised tool, it is essential for home builders to develop a presence on the Internet as it is imperative for companies of all areas of the economy to take advantage of the evolving facilities offered by the World Wide Web. This may go against the traditional nature of the construction industry which operates on a basis of making changes solely to increase productivity and decrease operating costs: technological advances are constantly occurring but only make significant inroads once they have been proven to be an improvement on the previous technology and not just an innovation which has no benefits in terms of economics or performance.

The author suggests that prefabricated builders have much to gain by having a Website: this can be a well developed site or a homepage at the very least. The Website should contain information such as a company profile (i.e. a brief history, its policies and philosophies, environmental concerns and related programmes it is involved in) and the company 's coordinates (i.e. location, telephone and facsimile numbers and E-mail address). The Website should also function as an electronic catalogue, allowing the user to browse through all of the prefabricated model homes that the company has available. Images and drawings (i.e. elevations, plans and details) can be displayed for each model as well as qualitative information (i.e. floor areas, room functions). Internet links with other companies (e.g. suppliers of building products and components that the prefabricator uses) as well as government

organisations and home builders' associations are useful for the user visiting the Website but also provide a positive appearance of collaboration among these companies and organisations which reinforces the way in which the Internet is an excellent medium for reducing the barriers of distance and borders.

6.2 Adaptability with Changing Needs and Times

The benefit for home prefabricators to have a well established presence on the Internet can be seen with both the short term and the long term strategies. The former causes a direct impact by having the company have exposure to a much larger client base. This is true for any business on the Web and although the percentages of on-line business-to-business and business-to-consumer transactions are still low relative to the total amount of sales, the figures are increasing dramatically. Similarly the short term advantage of companies getting on-line can be noticed in the speed of doing business: not only can companies communicate with suppliers and clients in local and distant places almost instantaneously, but they can also improve their own internal communication systems through the implementation of an Intranet network. The potential for high-speed and long-distance communications ranges from sending construction drawings or cost analyses to using Web phones and video conferencing via the Internet to communicate in real time in order to obtain a very high level of interaction between users, e.g. streaming video files can be essential in the case of a builder immediately solving a technical problem with a client without having to be present. Internal communication can also be improved through better distribution networks and storage of information such as working drawings and other computer developed files, e.g. financial statements and other correspondence. A successful Intranet will allow a home prefabricator to have an efficient system of updating drawings thus avoiding costly errors of discarding the most recent versions of documents or of performing repetition of changes to the same file.

The long term benefits of prefabricated home manufacturers having a well developed Website and Internet exposure will be realised in conjunction with the increased growth of the Internet as an appropriate and essential medium for commerce. As the use of the Internet and E-commerce grows, as predicted by current studies, the experience of present Internet users will be valuable in order to allow these businesses to increase their Web literacy and implement the most recent features and applications available.

6.3 Customisation for Different Company Needs

The tool can be suited for the specific needs of the company, whether they be a home prefabricator or a building product or component manufacturer. The software prototype described in Chapter 5 allowed only a limited number of choices for each available option, whereas the company can determine the level of flexibility offered to the user. The company may decide to allow the user to not only browse through the catalogue of predetermined selections but also to give the user the opportunity to use their own drawings or specifications to update an existing model or to create an altogether new design, e.g. in the case of an export situation where the foreign client is relied upon by the company to provide a house design that will conform to the local codes and regulations. The user can give these suggestions and changes in real time to the company; the use of CAD software in conjunction with Internet browser plug-ins allows the client to update drawings and work on the same file with the user on the other end of the network connection.

The home manufacturer also can decide the method by which the tool can be accessed by users. The tool can be distributed by the company as a CD-ROM which can be sold and marketed on a Website (as a download) or through exposure in other media, e.g. builders' journals and

magazines or with the help of home manufacturers' associations. A major task however is the process of updating the material. If the company decides to use such a tool directly through an Internet Website, they must engage the services of a Web programmer to create a site which can easily be changed. Many applications to create Web pages exist which require little programming experience or knowledge, however a complex and interactive tool can call for specialised know-how. Similarly the information database must be designed to be easily updated.

With respect to the proposed tool, the author concludes that with the existing state of the Internet, it is more important for companies to develop their Websites (in order to reach more potential client through greater exposure) and to increase their use of electronic networks (in order to communicate at a much higher rate and to take full advantage of the flexibility, speed and simplicity of computer systems and applications). However the suggested Internet tool is a mechanism that would allow companies to communicate and do business at a much more interactive level with the participation and involvement of the user or client whatever their position be, e.g. developer, foreign builder or architect.

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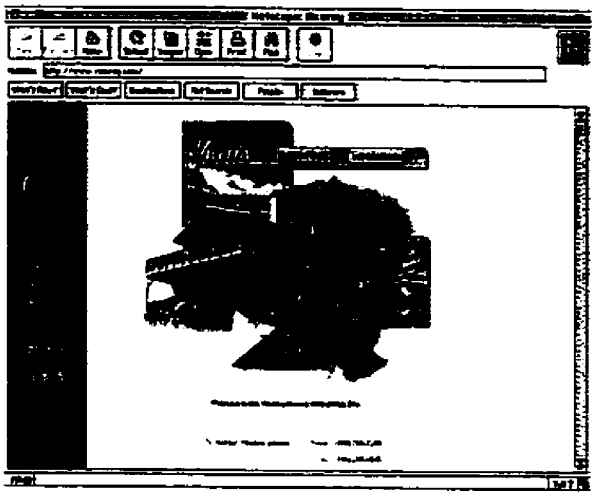


Figure A.4.1 Homepage for Viceroy prefabricated homes (http://www.viceroy.com, 1997)

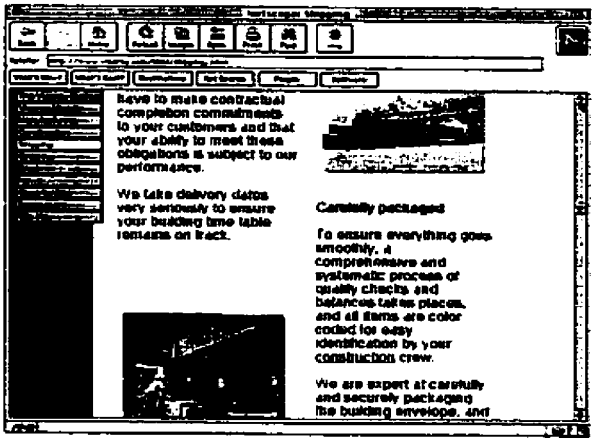


Figure A.4.2 Shipping information Web page (http://www.viceroy.com/html/shipping_.html, 1997)

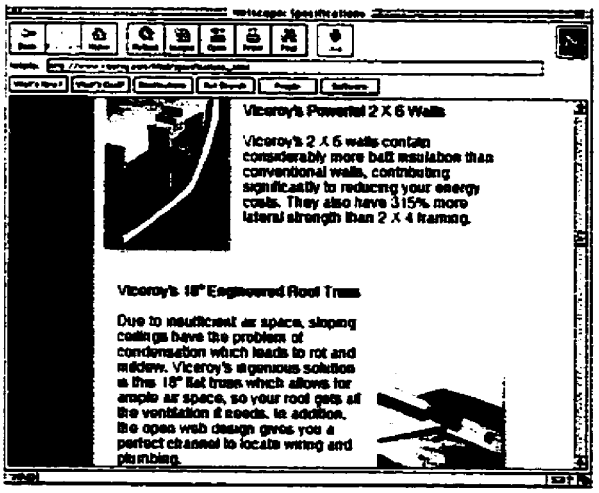


Figure A.4.3 Typical construction details (http://www.viceroy.com/html/specifications_.html, 1997)

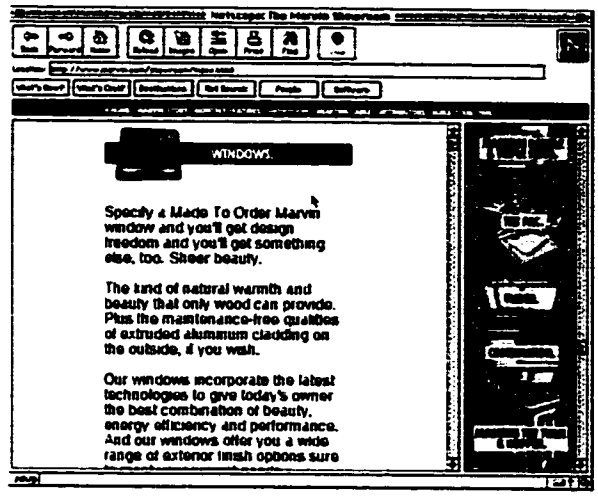


Figure A.4.4 Window manufacturers catalogue (http://www.marvin.com/showroom/index.html, 1997)

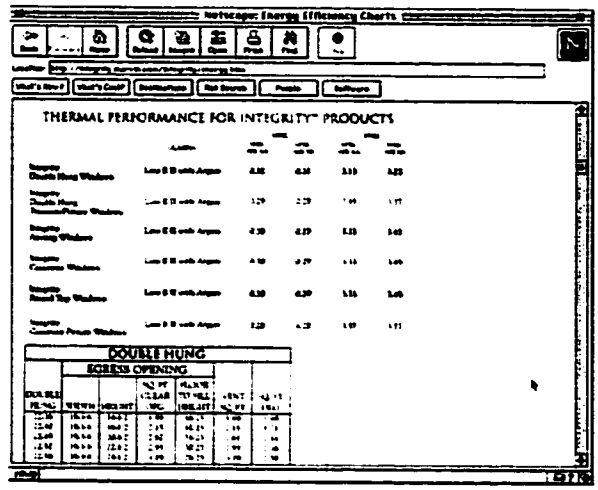


Figure A.4.5 Specifications sheet Web page (http://www.marvin.com/integrity/energy.htm, 1997)

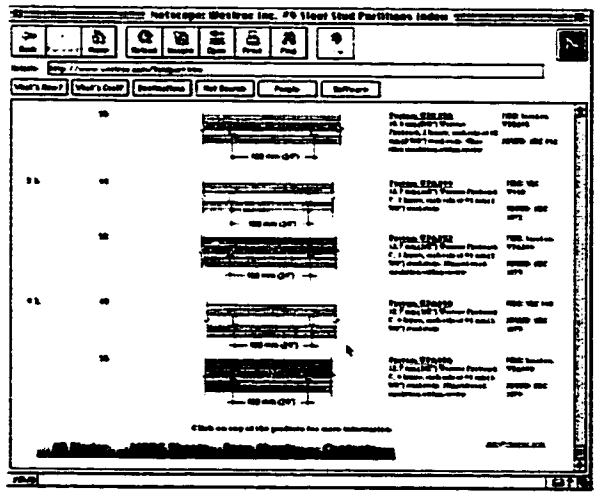


Figure A.4.6 Standard wall section details and specifications (http://www.westroc.com/9stdpart.htm, 1997)

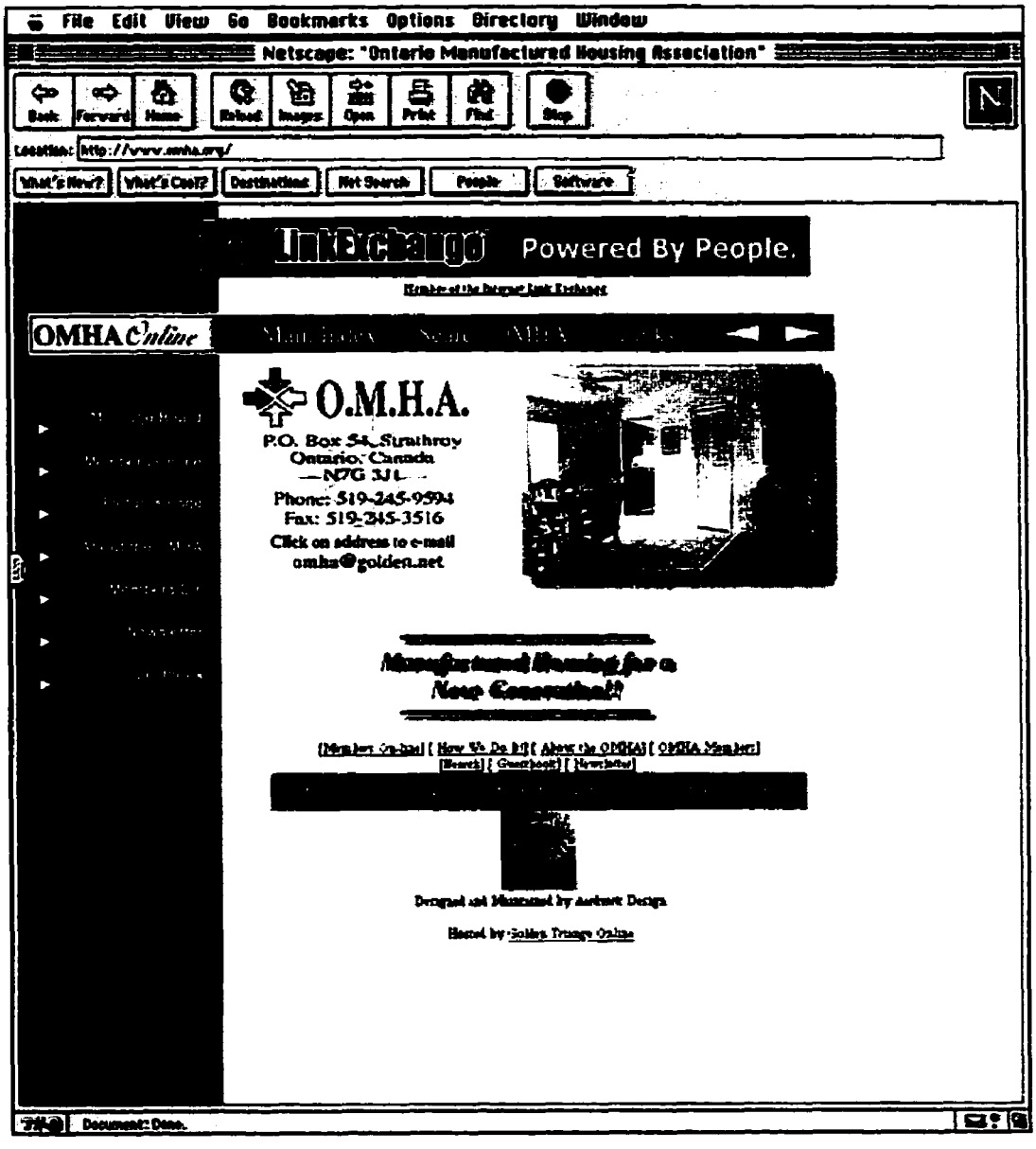


Figure A.4.7 The Ontario Manufactured Housing Association's homepage (http://www.omha.org. 1997)

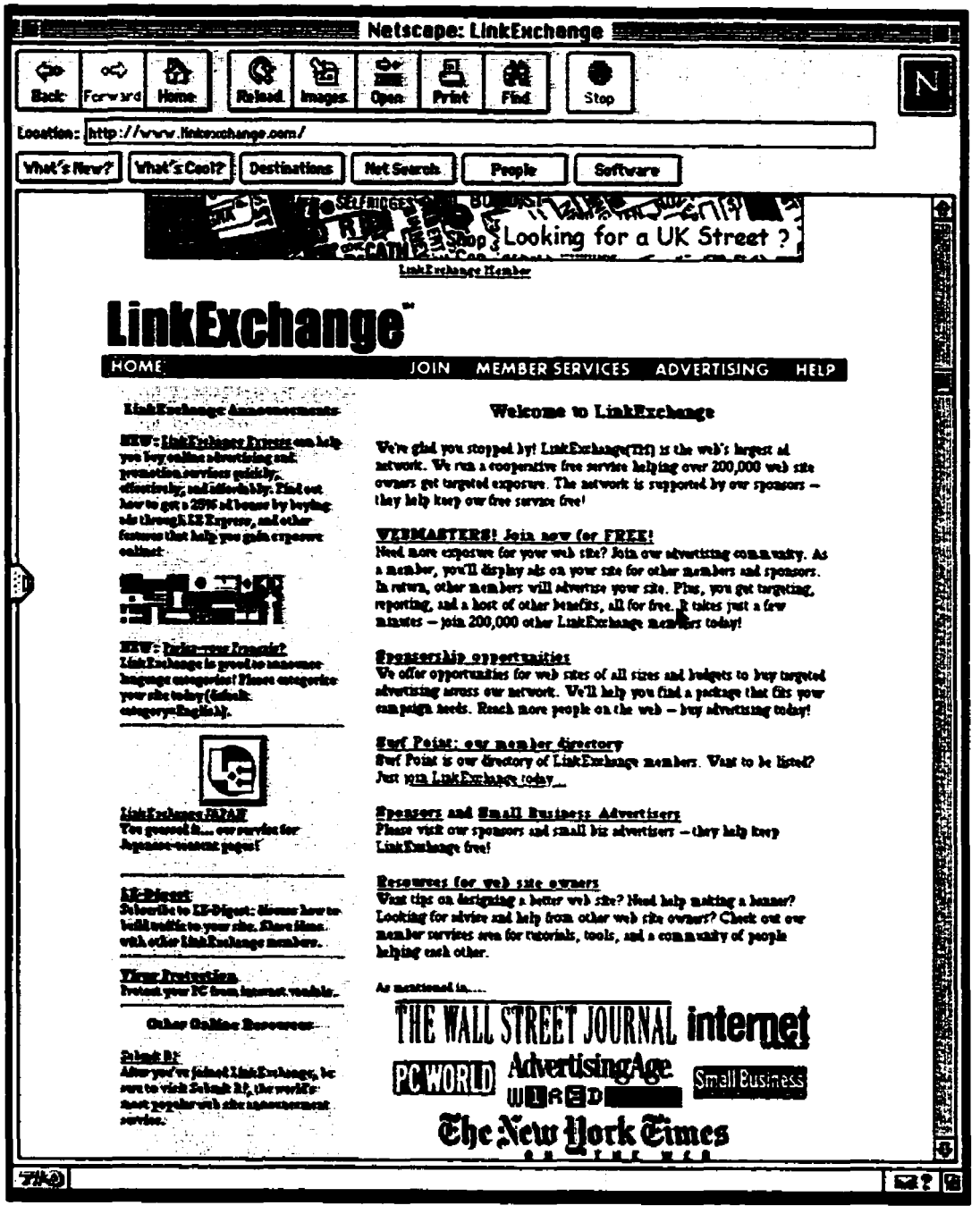


Figure A.4.8 LinkExchange™ Website provides companies with Internet links (http://www.linkexchange.com. 1997)

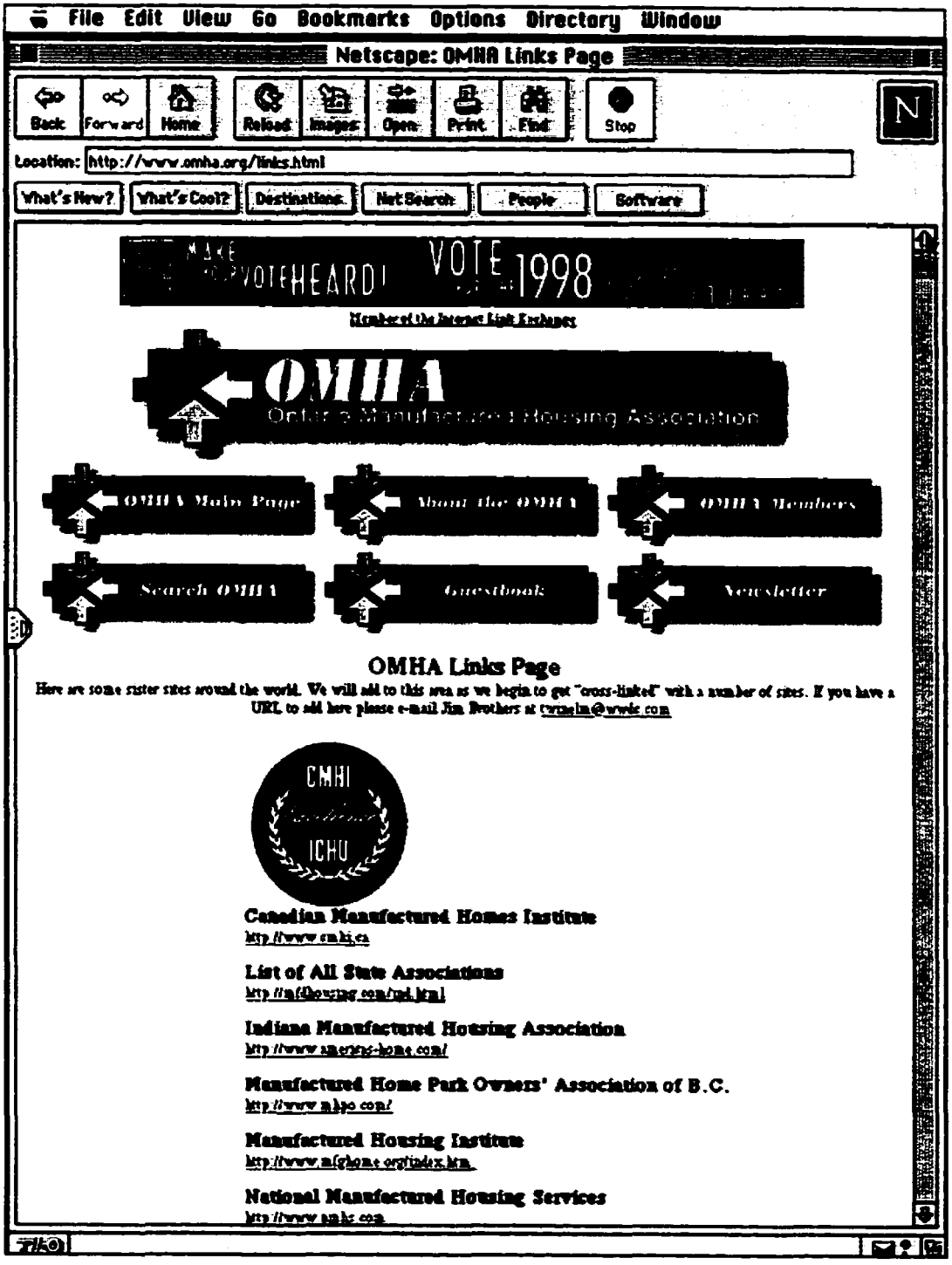


Figure A.4.9 Links for the OMHA as provided by the LinkExchange™ (http://www.omha.org/links.html, 1997)