A SEMIOLOGICAL ANALYSIS OF URBAN SPACE IN TRANSITIONAL CULTURES:

A CASE STUDY OF TASHKENT'S CITY CENTRE

A Thesis

By

Daniel A. Demytrie

Department of City Planning
University of Manitoba
Winnipeg, Manitoba

National Library of Canada
Acquisitions and Bibliographic Services
395 Wellington Street
Ottawa ON K1A 0N4
Canada

Bibliothèque nationale du Canada
Acquisitions et services bibliographiques
395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre reference

Our file Notre reference

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-53147-3

Canada

THE UNIVERSITY OF MANITOBA

FACULTY OF GRADUATE STUDIES

*****

COPYRIGHT PERMISSION PAGE

A Semiological Analysis of Urban Space in Transitional Cultures:

A Case Study of Tashkent's City Centre

BY

Daniel A. Demytrie

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirements of the degree of Master of City Planning

DANIEL A. DEMYTRIE

Permission has been granted to the Library of The University of Manitoba to lend or sell copies of this thesis/practicum, to the National Library of Canada to microfilm this thesis/practicum and to lend or sell copies of the film, and to Dissertations Abstracts International to publish an abstract of this thesis/practicum.

The author reserves other publication rights, and neither this thesis/practicum nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Abstract

The thesis examines the issues of architectural and urban semiotics in Tashkent, Uzbekistan. It reviews and analyses the changes that have occurred from the onset of Russian rule to the present (2000), summarising the changes in the urban fabric that have occurred prior to Soviet rule, during Soviet rule, and since Perestroika. The inquiry is driven by the reclamation of urban and cultural identities in light of the lifting of a hegemonic rule. The author performs a semiological analysis of urban space and artefacts, interprets the results and presents a design intervention for Tashkent's city centre.

The literature review undertaken prior to the empirical research is thorough and considered to be sufficient in providing information to serve this research as well as future endeavours in this area of study and in architectural and urban semiotics. The aim of a defined case study is to provide enough information as to allow the reader to develop thoughts beyond those of the author. This is done with a review of various sources of information, all of which are felt to be critical to the development of a comprehensive understanding of Tashkent's urban cultural identity.

The design intervention is intended as a starting point for future discourse addressing the expression of cultural identity through urban artefacts and organisation in Tashkent's city centre. While the design intervention proposes an urban design and organisation, it should not be interpreted as an event or artefact that is itself a solution. Rather, the intervention is intended to challenge readers and provide a medium through which readers propose alternative ideas.

Acknowledgements

This work is by no means the effort of one individual. The author acknowledges the gracious help of a number of individuals involved in the formation of this final work. Moreover the author would like to recognise those contributors as being critical to the development of this case study. The nature of a case study demands a thorough understanding of either an event or a place, and requires the investigator to become well versed in the more subtle aspects of the case. If he/she is to create a work that communicates ideas that will lead to further study within the identified subject area, then such subtle aspects must be considered critical. As such the author thanks the one individual that maintained a working relationship with the author and who in every respect helped to convey the essence of place in Tashkent. Otanazar Rahimovich Matyakubov, First Minister of the Ministry of Cultural Affairs, acted as a remarkable mentor and his contribution to this work is greatly appreciated. Further the author would like to thank the co-operation received from the staff in the Archival Department at the Ministry of Cultural Affairs.

Mention must be made for the assistance that was received from an individual who was of enormous help in the translation of certain documents involved in this study. Raihon Matyoqub has been an invaluable assistant over the months of completion of this work, and her help is recognised as critical to the completion of this thesis.

List of Figures

FIGURE 1.	FORTIFICATION WALLS OF TASHKENT	56
FIGURE 2.	FORTIFICATION WALLS OF TASHKENT	57
FIGURE 3.	TYPICAL URBAN STREETSCAPE	57
FIGURE 4.	TASHKENT'S SHAKHRISTAN	58
FIGURE 5.	PLAN VIEW OF TASHKENT'S PRE-COLONIAL BAZAAR	62
FIGURE 6.	ASSORTED VIEWS OF THE BAZAAR'S ROOFTOP	63
FIGURE 7.	ASSORTED VIEWS OF THE BAZAAR'S ROOFTOP	64
FIGURE 8.	INTERIOR ROOF OF BAZAAR	65
FIGURE 9.	ENTRANCE TO THE BAZAAR	65
FIGURE 10.	THE HASTI IMAM COMPLEX	67
FIGURE 11.	THE SAMARKAND GATE IN TASHKENT'S FORTIFYING WALL	68
FIGURE 12.	AN UZBEK (TASHKENT) MOSQUE	68
FIGURE 13.	INTERIOR OF UZBEK COURTYARD HOUSE	72
FIGURE 14.	UZBEK AIWAN – CENTRAL AREA OF SOCIAL ACTIVITY	72
FIGURE 15.	ENTRANCE GATE TO UZBEK COURTYARD HOUSE	73
FIGURE 16.	STRUCTURAL COLUMN CAPITAL	73
FIGURE 17.	STRUCTURAL COLUMN BODY	74
FIGURE 18.	STRUCTURAL COLUMN BASE	74
FIGURE 19.	PLAN OF RESIDENTIAL HOUSE – SHOWS ICHKARI IN THE CENTRE SPACE	75
FIGURE 20.	PLAN OF RESIDENTIAL HOUSE – SHOWS VARIATION ON STANDARD PLAN	75
FIGURE 21.	VARIATIONS ON THE PLAN OF THE COURTYARD HOUSE	76
FIGURE 22.	SELMASH BAZAAR – ENTRANCE	153
FIGURE 23.	SELMASH BAZAAR – SIDE VIEW	153
FIGURE 24.	SELMASH BAZAAR – AISLE	154
FIGURE 25.	SELMASH BAZAAR – PERIPHERAL STORES AND SHOPS	154
FIGURE 26.	SELMASH BAZAAR - FUNCTIONAL ELEMENTS OF THE ROOF	155
FIGURE 27.	SELMASH BAZAAR – FUNCTIONAL ELEMENTS OF THE ROOF	155
FIGURE 28.	RESIDENTIAL COURTYARD HOUSE	161
FIGURE 29.	RESIDENTIAL COURTYARD HOUSE – ARTICULATION OF WINDOWS	161
FIGURE 30.	RESIDENTIAL COURTYARD HOUSE – ENTRANCE GATE	162
FIGURE 31.	RESIDENTIAL COURTYARD HOUSE – DOORWAY ENTRANCE (COLONIAL MODIFTN)	162
FIGURE 32.	AMIR TIMUR PUBLIC GARDEN – WALKWAY	165
FIGURE 33.	AMIR TIMUR PUBLIC GARDEN – ALCOVE WITH STREET LAMP	166
FIGURE 34.	AMIR TIMUR PUBLIC GARDEN – STEPS/CHANGE IN LEVEL WITHIN THE GARDEN	166
FIGURE 35.	AMIR TIMUR PUBLIC GARDEN – FOUNTAINS (CONTEMPORARY)	167
FIGURE 36.	AMIR TIMUR PUBLIC GARDEN – MONUMENT TO TAMERLANE (AMIR TIMUR)	167
FIGURE 37.	AMIR TIMUR PUBLIC GARDEN – STREET LAMP (BASE)	168
FIGURE 38.	AMIR TIMUR PUBLIC GARDEN – STREET LAMP (LIGHT FIXTURE)	168
FIGURE 39.	INDEPENDENCE SQUARE – WITH MINISTRY OF MIDDLE AND HIGHER EDUCATION	172
FIGURE 40.	INDEPENDENCE SQUARE – WITH CABINET OF MINISTERS BUILDING	172
FIGURE 41.	INDEPENDENCE SQUARE – WITH NATIONAL LIBRARY NAVOI	173
FIGURE 42.	INDEPENDENCE SQUARE – MONUMENT OF UZBEKISTAN (FORMER LENIN)	173
FIGURE 43.	MINISTRY OF MIDDLE AND HIGHER EDUCATION – FRONT FAÇADE	177
FIGURE 44.	MINISTRY OF MIDDLE AND HIGHER EDUCATION – INDEPENDENCE SQUARE	177
FIGURE 45.	CABINET OF MINISTERS BUILDING – FRONT FAÇADE	181
FIGURE 46.	CABINET OF MINISTERS BUILDING – PERSPECTIVE WITH LANDSCAPING	181
FIGURE 47.	NATIONAL LIBRARY NAVOI – PERSPECTIVE	184
FIGURE 48.	NATIONAL LIBRARY NAVOI – ENTRANCEWAY	184
FIGURE 49.	NATIONAL LIBRARY NAVOI – FENESTRATION	185
FIGURE 50.	PALACE OF CULTURE – FRONT ENTRANCE	189
FIGURE 51.	PALACE OF CULTURE – PERSPECTIVE	189
FIGURE 52.	SELMASH FACTORY – PERSPECTIVE	193

FIGURE 53.	SELMASH FACTORY – PERSPECTIVE	193
FIGURE 54.	SELMASH FACTORY – DOORWAY	194
FIGURE 55.	SELMASH FACTORY – WINDOW	194
FIGURE 56.	SELMASH FACTORY – FENESTRATION	195
FIGURE 57.	SELMASH FACTORY – RHYTHM AND MASSING	195
FIGURE 58.	SOVIET HOUSING – IN CONTEXT	198
FIGURE 59.	SOVIET HOUSING – PERSPECTIVE	198
FIGURE 60.	SOVIET HOUSING – ENTRANCE	199
FIGURE 61.	SOVIET HOUSING – STAIRWELL LOUVERS	199
FIGURE 62.	SOVIET HOUSING – STAIRWELL RAILINGS	200
FIGURE 63.	SOVIET HOUSING – ORNAMENTAL PANELS	200
FIGURE 64.	SOVIET HOUSING – EAST SIDE	201
FIGURE 65.	SOVIET HOUSING – NORTH SIDE	201
FIGURE 66.	MIR SUPERMARKET AND FAST FOOD – RHYTHM AND MATERIAL USE	204
FIGURE 67.	ZARAFSHAN – FRONT FAÇADE	208
FIGURE 68.	ZARAFSHAN – MAIN ENTRANCE	208
FIGURE 69.	NEW APARTMENT COMPLEX – PERSPECTIVE	211
FIGURE 70.	NEW APARTMENT COMPLEX – FRONT FAÇADE	211
FIGURE 71.	CULTURAL BEDAUB – FIGURE GROUND	239
FIGURE 72.	CULTURAL BEDAUB – FIGURE GROUND DETAIL	240
FIGURE 73.	LINEAR BEDAUB – SPATIAL BORDERS	245
FIGURE 74.	LINEAR BEDAUB – SPATIAL BORDERS DETAIL	246
FIGURE 75.	LINEAR BEDAUB – SPATIAL BORDERS DETAIL	247
FIGURE 76.	ARTEFACT BEDAUB – THE CATALYST	249
FIGURE 77.	ARTEFACT BEDAUB – THE CATALYST	250
FIGURE 78.	ARTEFACT BEDAUB – THE CATALYST	251

FIGURE A.	PLAN OF PRE-COLONIAL TASHKENT (CC. 1830)	139
FIGURE B.	PLAN OF COLONIAL TASHKENT (CC. 1865)	140
FIGURE C.	PLAN OF SOVIET TASHKENT (1933)	145
FIGURE D.	PLAN OF SOVIET TASHKENT – CITY CENTRE (1933)	146
FIGURE E.	PLAN OF SOVIET TASHKENT – CITY CENTRE (1933)	147
FIGURE F.	PLAN OF CURRENT TASHKENT CENTRE (1996)	150

Table of Contents

1 CHAPTER ONE: INTRODUCTION 1

1.1 INTRODUCTION 1
1.1.1 Problem Statement *2*
1.1.2 Objectives *2*
1.2 TACTICS 4
1.2.1 Interview Instrument *4*
1.2.2 Photographic Survey *5*
1.2.3 Cartographic Survey *5*
1.3 LITERATURE REVIEW 5
1.3.1 Semiotics *6*
1.3.1.1 Saussure & Peirce 6
1.3.1.2 Lacan & the Signifier 8
1.3.2 Semiotics of Architecture and the Built Environment *10*
1.3.3 Urban Semiotics *10*
1.3.3.1 Urban Design and Planning 11
1.3.5 Soviet Hegemony in Uzbekistan *12*
1.3.5.1 Site Analysis Materials 12
1.3.5.2 Summary 13
1.4 ORGANISATION OF THE THESIS 13
1.4.1 Breakdown of Chapters *13*
1.5 SETTING LIMITS 15
1.5.1 Biases *15*
1.5.2 Limitations *15*

2 CHAPTER TWO: SEMIOTICS & URBAN SPATIAL ORGANISATION 17

2.1 SEMIOTICS 17
2.1.1 Syntagms and Paradigms *19*
2.1.2 Denotation and Connotation *20*
2.1.3 Allegory *21*
2.1.4 Messages *22*
2.2 SEMIOTICS OF THE BUILT LANDSCAPE 22
2.2.1 Architecture and Communication *23*
2.2.2 Stimuli and Communication *25*
2.2.3 Denotation and Connotation in the Built Landscape *26*
2.2.4 Primary Function and Secondary Function *28*
2.2.5 Structure and Event *29*
2.2.6 Coding *31*
2.3 ICONIC SIGN SYSTEMS OF THE BUILT LANDSCAPE 34
2.4 SPATIAL ORGANISATION, ARCHETYPES & PLACE-MAKING 36
2.4.1 Mythical Places *37*
2.4.2 Essential Qualities *38*
2.4.3 Dialectics *39*
2.5 URBAN SEMIOTIC ANALYSIS (POINTS, LINES, PLANES AND TIME) 39
2.5.1 Modes of Production *41*
2.5.2 Urban Models *42*
2.5.2.1 Communal and Germanic Modes of Production 43
2.5.2.2 Asiatic Mode of Production 43
2.5.2.3 Antique and Esclavagist Modes of Production 44
2.5.2.4 Feudal Mode of Production 45
2.5.2.5 Industrial Modes of Production 46

3 CHAPTER THREE: TERRA INCOGNITO 48

3.1 UZBEKISTAN 48
3.1.1 *The Development of Turkistan* 50
3.1.2 *Colonialism in Turkistan* 51
3.1.3 *Terra Incognito* 52
3.2 ARCHITECTURAL AND SPATIAL DEVELOPMENT IN TASHKENT BEFORE 1917 53
3.2.1 *Tashkent* 53
3.2.2 *Canals* 53
3.2.3 *Fortification* 53
3.2.4 *Roads* 55
3.2.5 *Shakhristan* 55
3.2.6 *The Urda* 59
3.2.7 *Daha* 60
3.2.8 *Bazaar* 60
3.2.9 *Hasti Imam* 66
3.2.10 *Mosque* 66
3.2.12 *Mahallya* 70
3.2.13 *Residential Development* 70
3.2.14 Building materials 77
3.3 SOVIET CULTURAL HEGEMONY IN TASHKENT 78
3.3.1 *Russian Revolution of 1917* 78
3.3.2 *Soviet Period* 79
3.3.3 *Communism* 81
3.3.4 *Marx and Engels* 81
3.3.5 *Soviet Political and Economic Development* 83
3.3.6 *Totalitarianism* 83
3.3.7 *Totalitarian Governments* 84
3.3.8 *Control of Mass Communication* 84
3.3.9 *Control of the Economy* 85
3.3.10 *The Communist Manifesto* 85
3.3.11 *The Soviet Union – Planning and Architecture* 86
3.3.12 *Soviet Rationalism* 87
3.3.13 *Soviet Constructivism* 89
3.3.14 *A Brave New World* 92
3.3.15 *Socialist Realism* 93
3.3.16 *Soviet Urban Planning and Design in Tashkent* 94
3.3.17 *Political Space* 95
3.3.18 *The Square* 97
3.3.19 *Concentric Centres* 98
3.3.20 *Potemkin Streetscapes* 99
3.3.21 *A Dynamic Urban Fabric* 100
3.3.22 *The Factory* 100
3.3.23 *The Palace of Culture* 102
3.3.24 *Type F* 103
3.4 INDEPENDENCE & CULTURAL TRANSITION, 1991 – PRESENT 104
3.4.1 *An Independent Republic* 105
3.4.2 *Perestroika* 106
3.4.3 *What was Perestroika?* 106
3.4.4 *The End of Communism and the Emergence of Democracy* 107
3.4.5 *The Rational Basis and Idealistic Intentions of Perestroika* 108
3.4.6 *The Weakness of Perestroika* 109
3.4.7 *The Future* 111
3.4.8 *Autonomy* 112
3.4.9 *Space* 112
3.4.10 *Use* 113

3.4.11 Form *113*
3.4.12 The 'West' and their Conception of the City *114*
3.4.13 Derrida & Deconstruction *116*

4 CHAPTER FOUR:TACTICS **117**

4.1 A CASE STUDY 117
4.1.1 A Bounded System *117*
4.1.2 Context of Case Study *118*
4.1.3 Structure of the Case Study *119*
4.1.4 Purposeful Sampling *121*
4.1.5 Instrumental Case Study *122*
4.1.6 Forms of Data Analysis Associated with a Case Study *123*
4.1.7 Triangulation of Information *124*
4.1.8 Comparative Approaches *125*
4.2 THE STUDY AREA 126
4.3 THE CULTURAL MEETING PLACE 127
4.3 RESEARCH METHODS 129
4.4.1 Cartography *130*
4.4.2 Photography *130*
4.4.2.1 The Points 131
4.4.3 Interviews *135*

5 CHAPTER FIVE: ANALYSIS **135**

1.1 THE FINDINGS 137
5.1.1 Cartographic Analysis *137*
5.1.1.1 Pre-Soviet Mapping 138
5.1.1.2 Soviet Mapping 144
5.1.1.3 Post Soviet Mapping 149
5.1.2 Photographic Analysis *151*
5.1.2.1 Selmash Bazaar 152
5.1.2.2 The Courtyard House 159
5.1.2.3 Amir Timur Public Garden 164
5.1.2.4 Independence Square 170
5.1.2.5 Ministry of Middle and Higher Education 175
5.1.2.6 Cabinet of Ministers 179
5.1.2.7 National Library Navoi 183
5.1.2.8 Tashselmash Palace of Culture 187
5.1.2.9 Selmash Factory 191
5.1.2.10 Soviet Apartment Building 196
5.1.2.11 Mir Supermarket & Fast Food 203
5.1.2.12 Zarafshan Movie Theatre 207
5.1.2.13 New Apartment Building 210
5.1.3 Interviews *213*
5.2 REVIEW OF ANALYSIS AND DATA COLLECTION 222
5.3 AN ITERATIVE PROCESS 223
5.4 SYNTHESIS OF TACTICS AND INTERVENTION 225

6 CHAPTER SIX: INTERVENTION: SYNTHETIC SPACE, TRANSITIONAL VALUES & TERRA INCOGNITO **226**

6.1 A DISCURSIVE APPARATUS 226
6.2 SYNTHETIC CULTURE 227
6.3 TIME: REPRESENTING THE NOW 229
6.3.1 The Past, Present, Future and Simultaneity *230*
6.3.2 Regarding the Past: From Modernism to Postmodernism *232*
6.3.3 Globalisation and Maintenance of Identity *234*
6.4 PLANE: SPATIAL RESTRUCTURING 236
6.4.1 Commercial Limits: Traditional *236*

6.4.2 Administrative Limits: Modernism *237*
6.4.3 Consumptive Limits: Postmodernism *237*
6.4 LINES: MAKING RELEVANT CONNECTIONS 241
6.5.1 Transportation Lines: Traditional *241*
6.5.2 The Radiant City: Modern *243*
6.5.3 Lines of Communication: Post-modern *244*
6.6 ARTEFACT: A MULTILINGUAL CENTRE 248
6.6.1 The Non-Signifying Object *248*
6.6.3 Manifesto *252*

7. SUMMARY **253**

8. BIBLIOGRAPHY **256**

CHAPTER 1
INTRODUCTION

1 Chapter One: Introduction

1.1 Introduction

This work is inspired by a number of issues regarding the development of cultural identity. Foremost among these is the notion of urban space as cultural artefact. In realising that urban form and spatial organisation are just as much a representation of the ideologies, values and politics of our culture as the institutions that our urban spaces contain, one more readily understands that urban form and cultural expression are too closely related to be dealt with individually.

The expression of cultural values and ideologies using the built environment as a medium is understood by linguists, architects and semioticians as a non-verbal means of communication. As such, the means of communication may be analysed through both qualitative and quantitative measures, revealing meaning (semantics) and method (syntax) of a culture's language, enabling a cultural mediator, be s/he architect, urban designer, cultural historian or alike, to peel away the various layers that make up a culture's identity.

Though this is true of all cultures and all urban environments, examples of cultures that have experienced hegemonic rule, whether through colonisation, foreign occupation or military activity such as war, provide vivid models of cultural/urban semiotics. The subject of this thesis is the critical analysis of the multiple layers that collectively form the composite that is at one moment in time a representation of culture. Moreover, in order to provide a vivid example for such an analysis, the author has chosen the city of Tashkent in the former Soviet Republic of Uzbekistan as the case study. Tashkent offers a model that is both rich with material, having experienced seven decades of Soviet political, social and cultural domination, and being at an important time in its evolution. As in many former 'colonies', Tashkent is presently in a period of transition from Soviet influence to the influences of 'the West', and globalisation.

As a result, this period of transition could prove to be both critical and opportune for the development of the city as a medium of cultural expression.

1.1.1 Problem Statement

The period of transition that Tashkent culture is currently experiencing provides an opportunity not only for empirical analysis of a post-colonial culture, but an opportunity for proactive intervention. Tashkent culture is between the horns of a dilemma. Without intervention it is quite likely that this period may simply result in a trade-off from one hegemonic culture for the next. Tashkent, though a capital city of a 'newly independent state', and a major cosmopolitan centre for the entire region of Central Asia, faces the problem of developing an urban identity. That is to say, an urban identity that speaks of its nation and people; of its role in the future of Central Asia as a confederation of newly independent states; and as a distinct urban culture with its own vernacular and expression.

The issue becomes more complex when the threat of globalisation is introduced. Even through casual observation of the built environment, it is evident that Tashkent is already feeling the initial pressures of the 'international culture', and the westernisation of its urban spaces and artefacts. The construction of hotels, restaurants and commercial outlets in a non-specific 'international style' are beginning to appear all over the city. The city therefore has the opportunity to take a proactive role in preserving and/or creating its own urban identity, and the means of expressing that identity, if it is truly to aspire to cultural independence as well as political independence.

1.1.2 Objectives

The aim of this study is three-fold. Firstly a semiological analysis of urban space will be conducted in order to demonstrate the role semiotics and architectonic language plays in cultural expression. This will also establish the primary tools that will be employed in the analysis of Tashkent's urban space. Specifically, the space (Tashkent's city centre) will be organised into its primary spatial components – point, line, plane and time. The semiotic analysis will develop a relationship between the

primary components within the space and the culture that it is meant to express. Additionally, a relationship will be developed between the city centre and the city as a whole, with respect to the same criteria as the initial analysis.

Secondly this study examines historic and contemporary literature regarding the development of Tashkent's architecture and planning prior to and then during its experience of the Soviet cultural hegemony. Information is drawn from these eras, and integrated with current information regarding Tashkent's potential role as a "global city", determining the city's trajectory, and evaluating this in terms of its cultural identity and resultant spatial organisation.

Lastly, this study offers an intervention. Spatial and cultural development, from a semiological standpoint is integrated and a means of asserting cultural identity within the urban environment is articulated. Tashkent's urban identity is also scrutinised chronologically. A discussion ensues regarding: its position in time; its role in the past, present and future as cosmopolitan centre of Central Asia; its role as a former Soviet capital; its role as regional centre of Islam; and as the first 'global city' in Central Asia. This intervention takes the form of a series of vignettes describing 'potential' urban semiotic scenarios based on findings gained through data collection and analysis. The intervention includes the following: a proposal for figure-ground ordering for the city centre's 'cultural meeting places'; and a proposal, also in the form of a series of vignettes, depicting potential means of semiotic expression for the built environment of Tashkent's city centre.

The data collection and analysis that precede the intervention, and additionally provide the material for assertions made in the intervention, follow the primary means of spatial examination. These means are: point (figure-ground study); line (cartographic survey of key points and political borders and their relation to the spatial order); plane (interviews surveying the cultural plane); and time (lessons from the past and present, to proceed with a future development) (Tschumi, 1996).

Further, the intervention can be characterised in terms of the final product resulting from the design analysis. That is to say, the form that the final product (the intervention itself) takes is of key importance to the substance of the intervention, and the way this study is ultimately understood.

Finally the intervention is a discursive instrument, not so much a product in itself, but rather a catalyst for discussion, raising issues that may otherwise go unnoticed, or may be too often viewed in a

conventional manner. As such the 'product as catalyst for discussion' takes the form of a series of vignettes that illustrate potential scenarios and potential patterns of spatial and formal organisation. In doing so, these vignettes will ideally provoke debate and discussion.

This thesis covers material in a number of subject areas and in doing so will have interest for a wide range of people concerned with urbanism. The material covered demonstrates a close association with what is typically accepted as urban design and architecture. It deals with material such as the built environment, typology and cultural/heritage preservation. As such it is likely to hold interest for planners and designers. It also deals with the ideal of the expression of political, social and cultural independence and how these issues are dealt with through a semiotic venue. This should prove to hold interest for both semioticians, bringing them a new dimension for the application of semiological analysis and for individuals concerned with the development of social and urban policy, allowing them to view 'policy' in a way that has been diversified by the addition of semiotics.

1.2 Tactics

The following will be an introductory description of the means and methods of data gathering that will comprise the Tactics portion of this thesis. The three tactics include the performing of an interview with individuals in the field of urban design and architecture in the city of Tashkent; a photographic survey of specific artefacts within the study area; and a cartographic survey of the geography and organisation of the study area.

1.2.1 Interview Instrument

This study employs an open-ended qualitative interview process to gain information regarding the current state of urban planning and design, as it has been shaped by the Soviet era, and how it is adapting to the new phase associated with political independence. The interviews execute a line of inquiry that normally relies on subjective opinions, thoughts and preferences. As this thesis employs the format of a case study these types of references are particularly constructive in developing a qualitative understanding of the case.

1.2.2 Photographic Survey

A photographic survey of urban space within the study area is undertaken. This is done in order to provide a three-dimensional aspect to the patterns of spatial development, and the potential keys to the meaning that may be embedded within the area's built form. Additionally the photographic survey is used to provide visual material for semiotic analysis of particular points within the study area.

1.2.3 Cartographic Survey

This study employs a cartographic survey of Tashkent's city centre. This serves to provide information regarding the changes that occur in urban spatial patterns, and to analyse these changes chronologically. This method of data collection surveys two-dimensional (plan-view) representations of the study area. Included in this survey are maps, diagrams, technical drawings, blueprints and so forth, but they are not limited to type, format or formality. Ideally a cross selection of material, that may include 'informal' or 'unconventional' representations of the area, is preferred.

1.3 Literature Review

This literature review consists of four distinct but ultimately connected sections. Chapter 2 introduces the subject of semiotics in its purest form, as philosophical and literary tool, as dealt with by the "saints" of semiotics – De Saussure, Peirce and Lacan. This will enable the reader to discover and create a foundation for a rather enigmatic body of work. The second portion of Chapter 2 deals with the works of Umberto Eco, Geoffrey Broadbent, David Chandler, and Cobley and Jansz. Their work regarding the semiotics of architecture and the built environment will be reviewed, and salient points will be illustrated. The third section of Chapter 2 reviews the works of Gottdiener and Lagopoulos, especially that contributing to the highly specialised form of semiotics, known as urban semiotics, or the semiotics of settlement space. These works are analysed in terms of their potential contribution to a synthesis of political economy and cultural identity as it relates to the development of the urban environment. Ultimately this review looks for links between cultural semiotics and semiotics of the built environment.

Though all forms of semiotics, and indeed semiosis, are inherently linked, divining a relationship between cultural and urban semiotics, which could serve as a medium to mediate cultural identity in terms of urban design, may not be as readily accomplished. As this relationship will prove to be key to the development of tools of intervention or mediation in the case study, such an analysis will prove to be of significant importance.

Chapter 3 deals with material regarding Tashkent's urban development. This development will be structured into three periods: Pre-Soviet Tashkent, with a review of fundamental urban artefacts and spatial organisation; the Soviet period, with a thorough review of city planning and architectural theories that were prominent in the development of urban space in Tashkent during this time; and a brief review of material regarding the social condition and emerging urban environment in Post Soviet Tashkent.

1.3.1 Semiotics

This section of the literature review provides two sections that deal with the three main semioticians that deal with semiotics in its purest sense. Firstly, Saussure and Peirce are compared for their respective approaches to the theoretical foundations of semiotics. Lacan is dealt with in terms of his approach to the construct referred to as the signifier.

1.3.1.1 Saussure & Peirce

This portion of the literature review will primarily deal with the work of Jacques Lacan in terms of his views on semiotics, specifically regarding the "signifier" and its role in transference of meaning. As Lacan follows the school of semiotics that was essentially founded by Ferdinand de Saussure it becomes necessary to briefly illustrate the tenets of Saussurian semiotics. But first, a common note on semiotics and semiology.

Semiotics represents a range of studies in art, literature, anthropology and the mass media, rather than being constituted as an independent academic discipline. Those involved in semiotics include linguists, philosophers, psychologists, sociologists, anthropologists, literary, aesthetic and media theorists, psychoanalysts and educationalists (Silverman, 1999:4). Beyond the most basic definition, there is

considerable variation amongst leading semioticians as to what semiotics involves. It is not only concerned with intentional communication but also with our ascription of significance to anything in the world (Chandler 2000:4).

There are two divergent traditions in semiotics stemming respectively from Saussure and Peirce. The differences in the two approaches to semiotics and semiotic analysis can be illustrated with their respective semiotic models.

For analytical purposes every 'sign' is composed of two components: the signifier and the signified.

- *Signifier - the form which the sign takes*
- *Signified – the concept it represents*

The signifier is commonly interpreted as the material or physical form of the sign. The signified, on the other hand, is a mental construct – not a material thing at all. The relationship between the signifier and the signified is referred to as the 'signification'. This Saussurian model of the 'sign' goes further to stress that the signifier and the signified are inseparable. This distinction between signifier and signified has sometimes been equated with the dualism of 'form and content' (Chandler 2000:2). In this type of relationship the signifier is seen as the form of the sign and the signified as the content. Saussure's model excludes reference to an object existing in the world. The reference is only to a mental concept. The Saussurian model of the concept of meaning was purely structural and relational rather than referential. The meaning of signs is seen as lying in their systematic relation to each other rather than in terms of their reference to material things (Chandler, 2000).

Peirce diverges from this model of semiotics. While Saussure offers a binary relationship, which constitutes the 'sign', Peirce offers a triadic relationship.

- *Representamen – the form which the sign takes (not necessarily material)*
- *Interpretant – not an interpreter but rather the sense made of the sign*
- *Object – an object to which the sign refers*

Two key points arise from this interpretation of the semiotic model, that distinguishes it from the Saussurian model and that contribute to its exclusion from this study. Firstly the 'interpretant' or 'sign vehicle', as it is sometimes referred to, is recognised as a sign in itself (Chandler, 2000). The phrase 'unlimited semiosis' is often used to describe this model, as it leads to the notion of a series of successive interpretations within a sign (potentially ad infinitum) and is therefore beyond the scope of this study. Secondly, unlike Saussure's abstract 'signified', the Peircian 'object' is in fact an object that exists. While this does not mean that it is limited to physical objects, Peirce allocates a place for objective reality which Saussure's model does not (Silverman, 1999). In contrast to the first point, this aspect of the Peircian model puts too strong a limitation on the potential scope of this study.

1.3.1.2 Lacan & the Signifier

In the Saussurian tradition, Jacques Lacan describes the sign in terms of a binary relationship, made up of a signifier and a signified. Lacan furthers this model in terms of rendering the signification or meaning as that arising between these two components. He views this relationship as arbitrary, which leads one to believe that he is edging toward a more Peircian interpretation (Chandler, 2000). Lacan is far from the Peircian model. The arbitrary nature of the Lacan model of the signifier-signified relationship is derived from the realisation that no one signifier will have a specific signified, particularly through a cross-cultural dimension (Silverman, 1999). Lacan uses the analogy of foreign language and the cross-cultural meaning of a word from an unknown or rather unfamiliar language. He uses the example of the word 'rose'. While 'rose' appears in similar spelling and pronunciation across many different cultures, the meanings that it conjures up may be entirely different.

Lacan continues that the signifier and the signified make up 'signs' in a determinant language system (Silverman, 1999). By this it is meant that a sign obtains its meaning or signification only by its difference from other signs in the same language system. Signification arises out of the relationship of a signifier to one or more signifieds in a context of other signifiers, which are present either in a sentence, discourse, language, or cultural context. The key aspect of this activity for Lacan, is how the signification

arises and the role the signifier plays in this effect. As a result, this type of semiotic analysis places greater emphasis on the concept of 'structure' (Chandler, 2000).

Levi-Strauss, another in the Saussurian tradition, is perhaps less concerned with the signifier per se, than Lacan, but finds equal value in the production of cultural structures which are reproduced and reproducible in many different contexts. For Lacan and Levi-Strauss, structures are made up of signs, each sign comprising a piece of the structure. The structure is neither empirical (located in reality) nor transcendental (generating an account or position with respect to the empirical) (Silverman, 1999). The structure is located between the two. Thus a structure is not a part of a particular cultural situation, but rather is identifiable in many cultural situations. In its most basic terms it is made up of specific relationships of key elements. Silverman (1999) uses the example of a myth. Here signifiers may be different from one myth to another, but the relationships could be the same from one cultural context to the next. It is important to note that, as Silverman points out, signifiers are based in cultural contexts, but through their function in the structure they are abstractable from that context (Silverman 1999:7).

According to Lacan, the chain of signifiers or the 'syntagmatic chain' is key to an analysis of signification, much more so than the one-to-one relationship between the signifier and the signified. Hence, what is said adjacent to a signifier might provide more evidence of what is meant than what it denotatively states.

The works of Lacan and Levi-Strauss should prove to be of particular importance in structuring the theoretical underpinnings necessary for this study and its intervention. The nature of the semiotic 'structure' that Silverman outlines in Lacan's model should prove to be ideal both in terms of 'context' within an urban environment and within a hegemonic culture's cultural colonisation of a people and place. Moreover, the binary nature of the Saussurian model with its predilection for 'abstract' forms and concepts should prove to be appropriate in bridging Soviet hegemony and semiotic space.

1.3.2 Semiotics of Architecture and the Built Environment

The works of Geoffrey Broadbent and Umberto Eco have proven to be seminal regarding the study of the semiotics of architecture. Their work constitutes a significant effort to treat urban design and built form empirically. As a result cultural expression has entered a realm of analysis that allows for an examination of not only the urban artefact but also the social, economic and cultural spheres that produce these artefacts.

Eco analyses architectural components in terms of their meaning and function. Function is broken down into primary and secondary meaning. Eco reviews buildings and their composition in terms of how they communicate with their users. Furthermore, Eco breaks down our understanding and interaction with the built environment into denotative and connotative signs and signification. He has built upon the work of Saussure and Peirce and created a body of work that allows architects, urban designers and those who interact with such professionals to manipulate the environment and thereby influence the way users understand their environment.

1.3.3 Urban Semiotics

> "For urban semiotics in particular, material objects are the vehicles of signification, so that the symbolic act always involves some physical object as well as social discourse on it. In the case of urban semiotics these objects are the elements of urban space, for example, streets, squares, buildings and facades. Semiotic analysis can also be extended to include codes of property ownership, written texts of planning, the plans of a designer, urban discourse by the users of the city, and real estate advertising." (Gottdiener 1986:3)

For semiotics the 'urban' has in the past been defined by the precepts of Kevin Lynch and his reductionist approach to physical urban form. Gottdiener (1986) notes that Lynch's reduction of urban imagery to the physical form of the city and his stressing of legibility of spatial elements such as path, node, edge and so on, represented a watershed in architectural analysis. Lynch however has been criticised for his techniques of mental mapping and his attempts to get to a deeper understanding of a person's awareness of his environment through perception.

The focus for Gottdiener however is the possibility of unifying in one domain the entire range of 'semiotic' inquiry into the phenomenon of signification (Gottdiener, 1986). His approach asserts that "...semiotic systems contain, besides denotative codes, socially constructed values or ideologies which operate as connotative codes inseparable from denotation" (Gottdiener, 1986). His position would imply that the object of semiotic analysis is ideology, or more accurately, ideological systems, which are observed empirically and which are culturally specific. This differs somewhat from the Lacanian notion of signification being caught between the empirical and the transcendental, but nevertheless allows for a reinterpretation of the role that ideology can play in the production of urban space and human settlement.

Gottdiener (1986) continues by pointing out that the application of semiotics to the study of ideology asserts that the objects of analysis can also include the culturally specific value systems operating behind the languages of religion, philosophical discourse or even scientific theories. This argument is made primarily to contrast the precepts which Lynch has put forth, and which have come to dominate the mainstream discourse concerning semiotics of the urban environment.

Lynch is further criticised for being too focused on activity within an urban environment or city space, and that his style of analysis ignores the 'meaningful' (Gottdiener, 1986) aspects of the environment. While Lynch is categorised as believing that human activity 'adapts' to its environment, others including Ledrut, are felt to be both more progressive and more socially attuned to urban settlement. They have adopted the belief that urban inhabitants actively play a role in the production and use of the urban milieu through urban practices (Gottdiener 1986:7).

1.3.3.1 Urban Design and Planning

In addition to the material covered in the review of semiotics and the built environment, this study will also engage material that is perhaps more conventionally linked to urban planning and design. Since semiotics is a subject matter that is often very removed from typical planning and place-making work, particularly in the realm of Central Asian colonial and postcolonial architecture and planning, a body of work will need to be used to help bridge this gap, or rather to make the transition more smooth for those planners and designers that have no previous grounding in semiology.

In part this literature is made up of the works of Franck, Schneekloth and Brill. In their works the authors' contemporary views on place-making, archetypes and organisational principles of space provide for a common body of literature that deal both with place-making, as to be expected, and with urban typologies, which indirectly links the material to a semiological analysis.

Further, urban typologies and spatial organisation in international settings are dealt with in the works of H. Dandekar. Her edited works regarding spatial organisation and how it is influenced by globalisation is considered. These collected works provide a perspective on international scenarios dealing with issues, fundamentally linked to the subject matter of this study.

1.3.5 Soviet Hegemony in Uzbekistan

The material provided in this portion of the literature review covers Tashkent and its city centre prior to colonial control, during the Soviet period and subsequent to Perestroika. Additionally, a brief summary of this stage of the literature review is included.

1.3.5.1 Site Analysis Materials

This section of the thesis deals with material that responds to the nature of the situation in Tashkent, Uzbekistan, and more specifically the city centre. Because this study engages a semiotic analysis of urban spatial form in a culture enduring transition, performing a 'site analysis' could not be done entirely in a conventional way. By this, it is meant that the site was analysed both in terms of a traditional physical account of the urban space that is the city centre, but also as a cultural analysis. Though this may in fact be a part of a 'traditional' site analysis, in terms of population and human activity, this study has attempted to carry out the cultural portion of the site analysis in terms of political and social change. In these terms, the history of the city centre is analysed as it has adopted various roles within the city proper and within the culture of Tashkent.

In this capacity the literature review includes historical and political documentation regarding the city centre's physical and social development.

1.3.5.2 Summary

Ultimately, the various components that collectively make up the literature that is the adjunct subject matter of this thesis, are treated in such a manner as to expose the links that can be developed in order to design an intervention that most effectively mediates the question of cultural identity in Tashkent's city centre. As it is the belief of the author that the dilemma of cultural expression in urban spatial organisation is not simply a matter for one branch of semiotics, the cultural and urban semiotic analyses are treated without discrimination, save for the notion of human cultural expression. While the author accepts that urban spatial form is the medium by which cultural identity is expressed in this case study, it is also recognised that urban spatial organisation is comprised of many components, only one of which is the physical space.

1.4 Organisation of the Thesis

This section of the thesis provides a brief summary by chapter outlining the contents and aims of each.

1.4.1 Breakdown of Chapters

This thesis has been organised into seven chapters. Chapter One introduces the subject matter discussed in the thesis. There is also a demonstration of the author's knowledge of the subject matter and the interests that have driven the author to engage in this particular field of urban planning and design. Additionally, the author explains the aim and objectives for the study, and how the study was conducted.

Chapter Two begins the literature review of the various components that collectively comprise the subject matter under scrutiny in this thesis. Chapter two specifically deals with the subject of semiotics, and the semiotics of the built environment. Here the author lays out and scrutinises the science of built form semiology demonstrating its value and use in the study of cultural identity.

Chapter Three furthers the literature review by examining a body of work collectively entitled 'Soviet cultural hegemony'. This refers to attitudes and actions, both culturally and politically, between the

Soviet forces of administration and the people of Uzbekistan (Tashkent). Further, this chapter specifically examines hegemony in term of the Soviet Union's relationship to Uzbekistan, conveying the findings through the example of Uzbekistan and its capital city, Tashkent. This section furthers this line of analysis by examining changes in Tashkent's (city centre) planning and design, cultural make-up, and role as an instrument of communication in hegemonic conditions. This chapter is proven an elaborated site analysis of the cultural, political, social and physical condition of the case study site.

Chapter Four explains the tactics (research methods) used to collect and analyse information for the thesis. As a case study this thesis comprises an analysis of a specific land area and a specified set of urban artefacts. Artefacts include objects and spaces at both the macro-scale and the micro-scale. As the two primary contrasting layers (Soviet-political organisation, and Traditional (Uzbek)-commercial/Islamic organisation) of semiological form and space play the key roles in this analysis, specific elements such as the bazaar (commercial), the Park in Honour of Karl Marx (political), and Soviet residential patterns (political), are analysed in terms of micro-scale urban elements. At the macro-scale, contrasting organisational patterns and spatial relationships are used in the analysis.

Chapter Five examines the outcomes from the tactics used in the collection of information. The results of the interviews, the cartographic and photographic analyses are scrutinised and the findings are evaluated in terms of the contributions they can make to the design intervention. In this line of analysis, the tactics used to obtain valuable results will be examined in terms of their synthesis within the design intervention.

Chapter Six consists of the design intervention. The intervention is based largely on the results of the literature review, and the results from the site analysis.

Chapter Seven provides a summary of the thesis's direction, findings and recommendations.

1.5 Setting Limits

This portion of the thesis outlines the biases and the limitations that are prevalent in the construction of this thesis, particularly relating to the nature of the material and the abilities of the investigator.

1.5.1 Biases

In dealing with semiotics and the urban environment the likelihood of misinterpretation is quite high. The structure of semiology as a social science can be particularly problematic, particularly when dealing with issues such as cultural expression and artefact. Moreover, this study was conducted cross-culturally, heightening the possibility of even greater misinterpretation, or misrepresentation both during the execution of the research and in the analysis of the collected data.

Additionally, there is an inherent bias in the idea of intervention. In taking steps to act on an analysis of a situation, the mediator (person intervening) has made the assumption that s/he can both act in a responsible and beneficial manner, and the mediation is desired. As this thesis considers in a design intervention it is quite likely that both the act of intervening and the intervention itself should be highly scrutinised.

1.5.2 Limitations

The limitations of this study are numerous. Firstly, the scope of the analysis and the intervention are limited geographically. The study area is divided into two parts - a primary and secondary geographical space. The primary space is bounded by the definition of Tashkent's City Centre (see City Centre Study Area). It is within this space that the research was carried out, and for which the analysis was undertaken. Additionally, it is within this space that the intervention is carried out. The secondary space is defined as that of the city of Tashkent in its geographic entirety. This space is used as a point of reference only, being treated as a basis for helpfully defining the role of the City Centre.

Other limitations include the definition of the elements of spatial organisation (see sections 2.2, 2.3, 2.4), and the definition of the set of cultural meeting places (see section 4.3). The choices for these are based on the author's interpretation of places where populations gather and celebrate, in some fashion, qualities of their culture. As such, it may be suggested that there are an infinite number and type of such places, depending on how one chooses to define "celebration of culture" as a collective social act. For the purposes of scale, and to make for a more manageable research project, these have been predetermined.

CHAPTER 2
SEMIOTICS AND URBAN SPATIAL ORGANISATION

2.1 Semiotics

Though the term 'semiotics' is already defined in the introduction, it is nevertheless necessary to reiterate this definition, as the understanding of the this term is critical to a well-rounded understanding of the material that appears later in this study. Therefore, one can begin with the definition of the term 'semiotics' in the framework of its beginnings as a study of signs.

The word 'semiotics' comes from the Greek root *seme*, as in *semeiotikos*, an interpreter of signs. Semiotics as a discipline is simply the analysis of signs or the study of the functioning of sign systems (Cobley and Jansz, 1998). The notion that sign systems are of great consequence is easy to understand; however, the recognition that there is a need to study sign systems is very much a modern phenomenon (Cobley and Jansz, 1998).

In order to begin with the study of semiotics one must first look to the initial works of the Swiss born linguist, Ferdinand de Saussure (1857-1913). Saussure's approach to language differed fundamentally from that which nineteenth century philologists had offered at the time (Cobley and Jansz, 1998). His views opposed those of the diachronic camp of linguists that analysed changes that took place over time in specific languages. Saussure, on the other hand, pursued a synchronic linguistics. He offered an analysis of the state of language in general and an understanding of the conditions for existence of any language (Cobley and Jansz 1998). The focus of Saussure's synchronic approach was the nature of the linguistic sign. Through this he was able to make a number of crucial points which are integral to any understanding of the European study of sign systems.

Saussure defined the linguistic sign as a two-sided entity, or a *dyad*. One side of the sign was what he called the *signifier*. A signifier is the thoroughly material aspect of a sign. Inseparable from the signifier in any sign is what Saussure call the *signified*. The signified is a mental concept (Chandler, 2000). In most cases the language of semiotics tends to use terms in a way that may not be readily comprehended by the reader. A very simple example is often used to illustrate the point.

Taking the word 'city' from the English language, one can recognise the constituent signifiers as being /c/, /i/, /t/ and /y/. That which is engendered for the hearer is not the 'real' city, but a mental concept of 'cityness'. The hearer associates this sound with certain qualities or characteristics that he/she has come to understand as being 'cityness', such as buildings, streets, cars, people, noise, pavement and so on. The 'real' city that is being referred to may in fact be very different from what is being imagined as the general 'city'.

Saussure, it would seem, believed that the process of communication through language involves the transfer of the contents of minds (Cobley and Jansz, 1998). Paramount in Saussure's understanding of the linguistic sign is the arbitrary nature of the relationship between the signifier and the signified (Chandler, 2000). Arbitrary here means that the signified (in the example of the 'city', the mental concept of the city) is not engendered by the signifier (the sounds of /c/, /i/, /t/, /y/). The best way to illustrate this is by saying the word 'city' to a speaker of Turkish or some other language other than English. For this person the sound and visual representation of the word 'city' has no meaning related to that person's understanding of city or cityness. Additionally the word itself, for speakers of English, could quite easily be substituted with another word or sign. If enough people agreed that the word 'city' was obsolete, it could be substituted with any other sound (e.g. blongo), and if used among these people to mean city, then this would become the signifier of city.

Since this seems to be the case, Saussure postulated that there is no natural relationship between the signifier and the signified. In other words, certain sounds or visual forms were not inherently associated with particular mental concepts. However, with only this as an explanation, it was left unclear how certain signs could act as signifiers (Cobley & Jansz, 1998). Saussure explains this phenomenon in two parts, both of which seem to require one another in order to operate.

Firstly, there is signification by virtue of difference. This is meant to indicate that the signifiers are distinguished from one another, and are therefore associated with particular signifieds, by the nature of what they are not (Deely, 1990). A city is not a dog, and this is represented by the sign's differentiation in sound and form. The second part of this signifier-signified relationship is the fact that there must be an agreement of usage or signifier status (Deely, 1990). This, in linguistic circles takes the form of what is

called a speech community. A speech community can be defined as a collectivity (people) that agrees upon the signifier and its signification (Scalvini, 1980).

Sausurre furthers this model when he describes language as a system. The system, as it is described, is broken up into two parts. First there is the *parole*, or individual acts of speech. Second there is the *langue*, which is the system of differences between signs, as described above (Cobley & Jansz, 1998). The langue can be thought of as a communal cupboard where all possible signs of a particular language system are stored, ready to be accessed and used in the creation of a parole (Chandler, 2000).

2.1.1 Syntagms and Paradigms

Saussure gives further structure to language in his rules of combination (syntagmatic relations) and substitution (paradigmatic relations). In this Saussure envisions language as having a similar structure as that of a Cartesian plane with, its descriptive co-ordinates given by the x and y axis of a graph (Cobley & Jansz, 1998).

Syntagmatic relations, and the rules governing those relations, essentially give a parole its structure. In linguistics the parole with structure can in fact be described as a syntagm, governed by syntactic rules (Taborsky, 1998). A syntagm in a spoken or written language can be regarded as a linear combination of signs. This linear combination can be a sentence, or a phrase such as 'The cat sat on the mat.' Here the parole (in this case a written or verbal utterance) has a specific structure with a specific syntactic ordering of signs. In a syntagm the individual signs relate to one another in a specific way, giving the parole a particular structure and therefore a particular meaning or signification (Taborsky, 1998). The placement of the sign 'cat' is allowed by specific syntactic rules. 'Cat' is preceded by a definite article and followed by a verb.

Syntagmatic relations account for the signification that can occur as a collection of individual signs (Chandler, 2000). That is to say, as each individual sign component of the syntagm will have a distinct signification, so too will the syntagm in its entirety. Here the relationship between the signs designates a signification that is sometimes more than the sum of the individual components. This can be illustrated with an example of a syntagm that appears on American currency. "In God We Trust" appears

to, and does more than, indicate that Americans put their trust in God. It goes beyond this to indicate a pledge of allegiance to a greater power than ourselves, and alludes to a collectivity of Americans as "we".

Chains of signs operating in this fashion have a further quality that increases their complexity two-fold. The individual signs in a syntagmatic chain are flexible in terms of their substitution for other signs. This is what is called a paradigmatic relationship in sign chains (Deely, 1990).

Paradigmatic in this instance refers to the ability of the chain to substitute specific signs for others, as long as they fit within the structural rules of the chain and comply with logical reasoning (Deely, 1990). "The cat sat on the 5." This is substitution that neither fits within the rules of syntax (*5* in not a noun) nor in terms of logical comprehension. Adhering to the rules of paradigmatic relations, substituting *floor* or *rug* or *carpet* would certainly make sense in terms of the rules of paradigmatic and logical expression.

2.1.2 Denotation and Connotation

Signs and systems of signs (chains and longer linear combinations) can be said to relate to their signifieds in two different ways (Chandler, 2000). First, to recap, the sign is made up of the signifier (material object) that represents a signified (mental concept). The relationship between these two components is referred to as signification or 'giving meaning'. However this relatively simple equation becomes somewhat more complex when one understands that the way in which a signifier can act may vary.

Denotation refers to the signifier's direct representation of a material object or idea (Scalvini, 1980). That is to say, the signifier (a visual or verbal representation) is read literally. As an example, an image of the World Trade Centre towers in Manhattan, New York *denotes* just that, the World Trade Centre buildings. However there is alternative and complimentary form of signification that can be interpreted or read from such an image. The picture of the World Trade Centre can be read as an image invoking notions of world commerce, or the achievement of glass and steel construction in the modernist period of architecture, or the affluence of the business district in Manhattan. An image of a white dove can be read as both a picture of a specific phylum of the ornithological kingdom and as a symbol of peace. The example earlier of the message on the American dollar bill also displays this tendency to connote other

ideas beyond what is literally read from the sign. This second level of reading a sign is what is referred to as connotation (Scalvini, 1980).

2.1.3 Allegory

Roland Barthes (1986) makes reference to the relationship that exists in societies when they go about advertising themselves. The tourist board may be cited as an example that uses the relationship between denotative images and connotative meanings to falsely portray tourist locations. Shamrock Tours, a tourist agency managing flights and hotels and excursions in Ireland advertises their service through what they perceive as the type of rich 'Irishness' that they can use to seduce their prospective clientele. In their television advertisement they rapidly show images of smiling, laughing people, drinking a pint of Guinness, vast expanses of green fields and an elderly couple doing a jig in an old fashioned pub. These images, like most tourist-related advertising, are meant to conjure up feelings of real or authentic Irish experiences that you may have if you buy this service. The denotative aspects of the images are fairly normal. That is to say, they are all things that you are likely to see if you do go to Ireland. However, the connotations that are fabricated from these images are false. First of all, "Irishness' cannot be captured in a thirty-second time slot, with a hand-full of images portraying certain services of the tourist and commercial industries. Moreover, these images are used because the advertising agencies are relying on the fact that those people who will buy their service believe certain things about what it is to be Irish.

Distilling Irishness down into a few images of stereotypical activities or notions seems to be a potentially pejorative act. This, however, does not seem to be the case. Sales have resulted from this advertisement and there has not been any negative backlash from their portrayal of Ireland and Irishness. But the core problem still exists. The connotative abilities of the images (signs) have been falsely manipulated by the image's denotative qualities.

2.1.4 Messages

Barthes (1986) treats the denotative-connotative relationship in a rather uniquely analytical way. Signs, which for the most part are advertising images in Barthes' examples, are broken up into three categories. The first of which is the linguistic message, which refers to all the words in the advertisement. The second part of this analytical breakdown is the coded iconic message, which refers to the connotations (derived from the larger sign system of society) in the advertisement. Thirdly there is the non-coded iconic message, which refers to the denotations in the advertisement (Cobley & Jansz, 1998).

In the example of the Irish Tourist Service it is possible to break down the components of the advertisement according to Barthes' model. The name of the company 'Shamrock', the telephone number and mailing address are all part of the linguistic message. The authenticity and genuine culture of Ireland is the coded iconic message. The images of the green fields, the pints of Guinness and the elderly couple dancing the jig are all denotative signs.

It should be noted that in Barthes' model of analysis (Cobley & Jansz, 1998) the order in which the messages are placed is of major importance. The order represents the manner in which a consumer reads a sign. First the words, then the connotative meanings and, lastly, the literal image or sign.

2.2 Semiotics of the Built Landscape

The study of signification of elements in the built landscape is not restricted to the field of Urban Semiotics. Cognitive geography and environmental psychology for example, fields of study that either directly or indirectly deal with the signification of the components of the built landscape (Broadbent, 1980). These components are identified as material objects, and as such they are the vehicles of signification.

Signification can be understood in terms of the built landscape as a symbolic act that involves some physical object as well as some discourse on that object. In the case of urban semiotics these material objects may include elements as familiar as streets, sidewalks, tree plantings, public squares, building facades and buildings themselves (Barthes, 1980).

Barthes (1980) refers to urban semiotics as the 'study of the process of connotation or social signification of cultural objects relating to ascribed values.' Eco (1980) refers to all sign systems as a

cultural phenomenon, and represents culture as a form of communication, within which architecture [the design of the built landscape] is of particular importance.

2.2.1 Architecture and Communication

Firstly, if this is going to be a discussion of the means by which architecture and communication can be viewed as connected processes, or how architecture may communicate specific ideas, then it must be apparent, at least for the purposes of this discussion, what is defined as architecture. For this study architecture will find a definition as that portion of the environment that is human-made. More specifically, it includes that which is artificially made and, simultaneously, that which it comprises, i.e. in part, human settlement space. Ultimately, the term may be extended to industrial design, to include kitchen items, tables, chairs and so on, as they are all components of an artificial settlement space (Eco, 1980). But for the purposes of this discussion architecture will refer to both architecture proper (buildings, facades, etc) and landscape architecture (street layout, public squares and walkways etc.) and the architecture of community.

It is said that architecture is a product of functionality (Eco, 1980). That is to say that architecture 'functions', and is not *necessarily* a form of communication. However, it will be the aim of this portion of the study to illustrate that in fact 'function' itself can be realised as a form of communication. Moreover, if such a function is understood as means of communication then that function can be understood, at a much deeper level, as a phenomenon of culture (Eco, 1980).

While it is recognised that architecture has a functional quality, and for the most part it is understood as such by the lay person, there is an understanding that some architecture may act as communication (Preziosi, 1979). The typical illustrative example is the comparison between the cave and the cathedral. Most lay people (non-semioticians) recognise that the cave functions as a means of basic shelter or protection from the elements, and that the cathedral is something more (Broadbent, 1980). While the story that the cathedral tells may not always be apparent to the observer, according to Broadbent (1980) it nevertheless is obvious that there is something present in its form that supersedes functionality.

The point of this portion of the discussion however is to demonstrate that in fact the cave is just as much a vehicle of communication as the cathedral. Generally this example of the cave is drawn with the

scenario of the early human searching for a means of shelter. The cave is seen as a means of protection from the elements. The early human in his search finds a location (a cave) and sees that there is a place where the rain (or other weather-related troubles) is not falling. In an effort to get out of the rain the early human enters through the hole in the hillside and sits in a hollowed out area. While in the cave this person observes that there are certain components to the place that surrounds him. The portion of the cave that raises vertically from the floor, the flat portion over his head and the hole through which he passed in order to enter this space. This space and its components become recognisable as that place that provides relief from the elements. That is to say, this person associates that space and its components with what can now be called shelter.

After leaving the confines of this space (the rain has stopped) this person will now move on with the ability to recognise similar places, if he comes across them. It in fact this early human has developed the ability to draw then he may in fact communicate this idea to his friends. The symbol of the cave entryway drawn in the sand with a stick will act as a model for others to communicate the idea of shelter. However, even before this person communicates this idea of shelter to another person it (the idea of shelter) has already undergone a degree of personal codification (Broadbent, 1980). That is to say, as a result of his experience this person has codified the structure and layout (signs) of that place as being 'shelter' in generalised terms. In other words, if these signs are encountered again, then that space will be recognised as shelter.

Once this idea of shelter has been communicated to other early people these signs (shelter signs) become incorporated into the general social language (langue). To state this in the terms outlined earlier by Barthes (Cobley & Jansz, 1998), this would now be a coded-iconic message. Furthermore, the communication of this function promotes the fulfilment of this function. The symbol for shelter or cave, whatever that may be will have the act of taking refuge from bad weather associated with it. In other words, the symbol will promote a certain type of shelter and means of taking refuge, when it becomes part of the langue. As such, options to take refuge under a tree will not be as readily understood in general social discourse.

2.2.2 Stimuli and Communication

It can be argued that the way in which the built environment and its users and observers interacts is little more than stimulation (Eco, 1980). Eco makes the distinction between the two in terms of architectural artefacts, by using the example of the staircase. The staircase is, as Eco (1980) states, is a form of communication and not stimulation. Stimulation from a material object is likened to the shock that one may feel if for instance a bright light is cast in front of his eyes. A person will cover his eyes, turn his head away and so forth as an immediate reaction to the bright light. Further, the person is unlikely to physically interact with the light, nor is he likely to learn from the experience. That is to say, even though bright lights mean blinking or turning one's head away, this information is unlikely to change that person's behaviour the next time a bright light is passed in front of his eyes.

Communication is not exclusive of stimulation. In fact, communication can be said to begin from a source of stimulation (Eco, 1980). But the similarity ends there, since communication builds upon the experience of stimulation, to develop into what can be called communication. In the example of the staircase, one is said to be initially stimulated by the physical presence of this material object. However, after the initial stimulation, generally one is expected to interact with the material presence. In doing so one learns that the staircase requires specific physical movement to engage it. One also learns that the staircase leads to something else, something that is not available at the bottom of the stairs. Again, after having engaged the object (having climbed the staircase) one learns that there is something to be gained by interacting with the object in a specific way.

One's relationship to a staircase at this point (after realising what a staircase is and how it functions) allows that person to include that object (sign) in his personal sign library (Broadbent, 1980). From that point on, the presence of a staircase, or the image of a staircase will communicate to that person a specific action and a particular result. It can then be said that the signification (meaning) of the staircase sign permits a particular function and therefore a particular action on the part of the user (Eco, 1980). This, according to Eco (1980), is a fundamental form of architectural communication.

2.2.3 Denotation and Connotation in the Built Landscape

Eco (1980: 83) states that 'the meaning of a building is what must be done in order to inhabit it.' Additionally it can also be stated that the 'object of use is, in its communicative capacity, the sign vehicle of a precisely and conventionally denoted meaning, its function' (Eco 1980: 84). Both statements quote Eco's understanding of the denotative function inherent in the material object of the built environment.

Again, it is possible to clarify the way denotation and connotation plays out in architectural signification with the use of a few simple examples. Firstly, one may take the architectural component that everyone is familiar with, the window. Clearly the function of the window, regardless of its shape, size and location is to provide visual access to and from a closed environment. A porthole of any type will adhere to this denotative function. However, it becomes apparent that often there is more to the window than its simple function. The window often represents a symbolic function for a building mass or particular structural entity. The architect or designer will often use the window as an element of decoration or to communicate rhythm or a particular cultural pattern (Broadbent, 1980). In doing so it is quite likely that the primary function of the window, that is to say the denotative function, may be lost. In place of that is likely to be a blind window (one that does not permit visual access), or a window which is located in a place where visual access is not possible. In this case, as has been stated, the denotative function of the window is the symbolic function.

If indeed this proves to be the case quite often, then one may wonder how a person may interact with such functions. More to the point, one may wonder how one interacts with functions that are not familiar. If we return to the example of the staircase then it is possible to illustrate the importance of denotative references. If a person were familiar with the sign and function of a typical staircase, then he would expect to find certain visual clues to indicate the action or function that is associated with a staircase. If in fact these visual signs were absent and the function remained basically the same then the person would not be able to interact with that object, and communication would be lost. This can be seen in the example of the modern elevator. While essentially performing the same function as a staircase, the visual signs of operation or function are absent. While unlikely, a person who was not familiar with an elevator would not be able to use it, for the simple reason that the function was not communicated.

While this seems to be straight-forward, it does speak to a rather unfamiliar occurrence that can help illustrate the importance of this kind of denotation. In a rural population in the southern portion of Italy indoor plumbing was introduced into communities that had been accustomed to going to the fields to relieve their bodily wastes (Eco, 1980). The introduction of the standardised toilet to the homes of these people seemed simple enough, but ultimately proved to shed light on the importance of familiarity of form following function. Rather than using the toilets for their 'expected' use the toilets were used as basins for cleaning grapes gathered from the fields. What these examples illustrate is the importance of familiarity in communication of function.

In the example of the windows, symbolic function was mentioned as a means of communication. The role ideology can play in the connotative communication of concepts through architecture can be very important to many cultures (Broadbent, 1980). Returning to the basic example of the home, one may quite readily see that there are symbolic functions associated with the home that are not necessarily designed into the home, but nevertheless arise from an adoptive use of the material object.

If one looks at the denotative function of the home, it is quite easy to see that the function is that which was illustrated in the example of the early human, shelter. But one can just as easily recognise that the home means many more things, to many different people, than simply home. Security, familiarity, a sense of family, comfort and so on are all connotative functions that the home provides for its users (Broadbent, 1980).

Quite often the symbolic connotative function of the material object is looked on as having a lesser importance than the denotative function (Eco, 1980). This should not be thought to always be the case. Eco uses the example of the chair to illustrate the importance of symbolic connotative functions. A chair, according to Eco (1980), is just a place to facilitate sitting. However, when one adorns a chair with golden arms, an embroidered back and fancy little lions on the legs of the chair, it is no longer a 'chair' as in a 'place for sitting'; it becomes a throne. The chair connotes the regal, the dignified that which is beyond the simple act of sitting. In fact it is quite likely that the denotative function of 'sitting' may be lost. Often thrones are uncomfortable and not really designed with 'sitting' in mind. Rather they are meant to display a person in a particular way and elicit feelings 'in the realms of' regal and dignified. That then has become the throne's function.

In sum the denotative utilitarian function of the material object should not take precedent over its connotative symbolic function (Eco, 1980). Rather, it should be noted that the connotative functions of the material object are founded on the basis of the denotative utility of that object (Eco, 1980).

2.2.4 Primary Function and Secondary Function

Denotative functions and connotative functions are often described in terms of primary and secondary functions, respectively (Broadbent, 1980). This type of nomenclature is not however reflective of a degree of validity or import. Rather, it is reflective of structure (Broadbent, 1980). That is to say it reflects the primacy of having a denotative function first in order to build up a connotative function.

Material objects are broken down, in terms of primary and secondary function, when referring to their signification in terms of historical meaning (Eco, 1980). It is believed that, in changing cultural and historical contexts, that primary and secondary functions can be lost, mutated or transferred to other material objects (Eco, 1980). To illustrate this point one only has to look at the pyramids of Egypt. These are an excellent example of the dynamic nature of function (both primary and secondary).

The pyramids today hold very different primary and secondary functions than they did when they were originally conceived. The original primary function of the pyramid was a tomb for the pharaoh. The secondary function was that of ascension to the heavens and various alignments with the stars, which usually represented deities and the pharaoh's connection to them. Today, the pyramids do not function on either of these levels. While it may be understood that the pharaoh is buried inside the pyramid, the structure is not read as a tomb (Eco, 1980). Further, the relationship that the pyramid once held with celestial bodies is pondered but by no means is understood fully, nor with any probability, in the same way that it was understood in its original terms.

The pyramids do however still function. The structure itself is currently read as a symbol of 'ancient Egypt' and is used prolifically by the tourist industry. This could be understood as its primary function. Its secondary function is also a reflection of contemporary current of alternative beliefs. Many people subscribe to the belief that a pyramidal shape, and in fact the pyramids themselves, holds certain non-earthly powers and acts as a source of alternative energy and enlightenment.

Additionally, primary and secondary functions can be used in terms of falsification. That is to say, in addition to having their roles altered or changed, as illustrated above, it is also possible - and in fact quite prevalent - to have the original signification 'play' with these roles in an effort to communicate certain ideologies (Broadbent, 1980). This can be seen in the use of the column. The column's primary function is obviously to support a load above a certain space. In performing this act the column distributes the weight from the elevated body down through the column to the mass beneath the column. This transfer of load is the primary function of the column and its original reason for being. The secondary function of a column is to reflect some notion of either anthropomorphic character or, typically, a tree or similar naturally occurring vertical structure. However, there are in fact original examples of the use of this device that contradict its primary use, and in fact substitute this use as a connotative (secondary) function (Broadbent, 1980).

Often the column was 'overused'. In other words the presence of certain columns was not necessary from an engineering point of view. They in fact were false columns, not transferring load as they were meant to. Rather, the presence of these false columns was to connote a particular ideology. Therefore in this case, the column is seen as having a transfer of primary and secondary functions. The primary function is false or non-existent and the secondary function takes over as the primary function.

2.2.5 Structure and Event

The dialectical interplay between forms and history is an interplay between structures and events, between configurations that are physically stable as significative forms, and the constantly changing play of circumstances, which confers new meanings on them (Eco, 1980). In our current state of being, 'change' and, more importantly, the rapid pace of change, have become critical to our understanding of the relationship that exists between ourselves and the forms of our environment (Broadbent, 1983). That is to say of course that the forms, shapes and signs of our environment have become more intensely scrutinised, primarily due to the pace of change that is occurring today.

The most vivid way of observing this phenomenon is to try to understand our relationship to past forms and our use of them today. Eco (1980) refers to this process as the consumption of forms or the obsolescence of values. This phrase tries to explain the rapid changes in social mobility, technology and

communication that is taking place, and how this helps to shape our relationship with the past, and equally to reassert our values concerning objects that no longer carry their original meaning, to even to rediscover their meaning and have that shape our current value systems.

In the age of consumption, ideas and ideologies are no exception to the rule. In fact, one may say that the consumption of the idea has proved to be of key importance in shaping our current state of being. Moreover, it is felt that because of our current level of awareness and our semantic agility, the recovery of historical meaning within material objects has become a fairly common practice (Broadbent, 1983). However, with such ability comes a certain degree of corruption. By this it is meant that the recovery of certain material objects is not always accompanied by, nor is it always desirable to have, their true meaning. From this comes the distortion of meaning (Eco, 1980).

Recovering material objects and mutating the associated meaning is seen as quite common practice, and is usually viewed as having no moral or cultural problems associated with it (Eco, 1980). This can be expressed in our use of objects that retain their primary function, but whose secondary function is now obsolete. To return to the example of the column once again, it is possible to see this situation perhaps a little more clearly. As mentioned earlier, the function of the column more often than not remains the same in its dispersal of load. However, while this may be the case, the connotative meaning of the column (the secondary function) no longer exists. Having established this, it is now possible to move on to the question of its contemporary meaning, 'if a column is no longer an anthropomorphic symbol of strength or the human-technological marriage, then what does is mean.'

For the most part images of the past are imbued with connotations of 'the past' and sensations of nostalgia and things historical. This proves to be the case, and is typified, in postmodernist architectural design (Ledrut, 1986). Historical references in domestic buildings such as the detached suburban house are quite common. In larger (North American) homes the front porch is treated as a portico and is sided with columns. Contemporary building technology has surpassed the need to use such monolithic structures to support such loads, but they are, nevertheless, curiously present. One may surmise that their presence connotes (performs the secondary function of) representing something 'old', 'established', or 'time honoured'. The anthropomorphic message is obsolete in the column and the meaning has been corrupted to

mean something else. While this may be typical of post-modern design, there is something inherently modernist in this process of corruption.

The position that such designers (architects and alike) have taken in regard to the appropriation of historical signs reflects the modernist's sensibilities of deliberation and implementation (Eco, 1980). The position reflects the designer's ability to discern the correct use or reuse of an object regardless of previous cultural meaning (Ledrut, 1986). The situation for the example of the post-modern suburban architect has developed to the point where the langue of material objects (general social language) has come to include whatever part of history that is felt to be fashionable at the time. More importantly, this is (can be) done without regard to the ideological systems that produced these cultural artefacts.

If one views the responsible representation of cultural ideologies as an important quality of contemporary (post-modern) social intervention, then it would seem necessary for one to be able to view points in history as locations rather, than along a linear chronological line, with these various locations having equally valid, differing cultural values.

This is not to say that this is always the case. Indeed there are cases that reflect a responsible representation of historical connotations and cultural ideologies. But even in these cases the accurate representation of ideologies may not always be enough, or for that matter, an appropriate means of cultural behaviour. Nietzsche (Broadbent, 1983) refers to the current state of the modern world as suffering from an historical sickness. By this it is meant that the modern world suffers from an excess of awareness that, if not turned into an act of renewal, acts as a narcotic.

2.2.6 Coding

As readings of the primary and secondary functions of architectural signs change over time, in accordance with changing cultural values, the reading of these signs as representative of points in time and as artefacts of particular cultures is made possible through the use of architectural codes (Garroni, 1980).

Codes or code language refers particularly to the classification of secondary or connotative signs of a material object (Garroni, 1980). In developing an understanding of this type of classification it becomes easier to both read the secondary functions (in terms of their value-laden messages) but also in

terms of cultural syntagms. Recalling that a syntagm is roughly the equivalent of a visual sentence with particular rules of ordering (syntax), the understanding of a code language enables the observer to accurately read one syntagm that might be syntactically the same, within the cultural borders of another code language. In getting one's orientation (cultural location) correct, one is then able to comment on the representative value, or the means by which that particular culture articulates its value system (Cobley & Jansz, 1998).

Though codes can be complex and temporal it is possible to identify certain rudimentary codes to illustrate the position that codification maintains within architecture (Garroni, 1980). Perhaps one of the simpler examples is the church, and the variations in its spatial articulation over the course of history. Though the artefact's spatial configuration may change, the language within which it operates can be regarded as being the same. That is to say, the artefact has relied on basic Euclidean geometry with through cultural values are expressed (Garroni, 1980).

If one accepts that architecture is the art of spatial articulation, then one might be tempted to say that, within the confines such Euclidean geometry, one could find the most basic form of architectural coding (Broadbent, 1983). Such coding can be subdivided much like the primary and secondary functions within material artefacts. First articulation describes the coding that exists at the level of basic elements. Points, lines and curves, for instance, may be coded as elements of secondary articulation. Secondary articulation is typically characterised by elements that are distinct, but not yet meaningful. First articulation, on the other hand, is typically characterised by forms that are significant. The ellipse, square, triangle and parallelogram are typically coded as first articulation, as they are said to be endowed with meaning. In principle, the geometric shape can achieve any degree of complexity (and thereby encode within itself greater meaning) as long as the form can be explained by geometric equations (Garroni, 1980).

Stating that architectural form can be broken down into geometric forms does not mean that architectural forms are based in a geometric code (Eco, 1980). Rather, Euclidean geometry can be regarded as a language with which one articulates architectural form. In this regard then, Euclidean geometry is more of a meta-language, in the sense that the principles of geometry go beyond the confines of architecture into other fields of cultural analysis and development (Garroni, 1980). To be sure, it must be stressed that such a meta-language as geometry is something within which coding occurs, and it itself is not a base line from

which analysis is to be done across the cultural spectrum (Eco, 1980). An easy way to illustrate this is to analyse a Japanese pagoda and an Indian temple. Ultimately, both will be broken down into their component geometric parts, and it is quite possible that many of these parts could be shared. This is, of course, not an indication of shared cultural values between the two groups. Rather this may be seen as two distinct groups sharing a language that is of equal use in terms of its most basic articulation. The use of a circular concave form for a roof may indeed connote a meaning of the heavens or unearthly bodies for both, but the articulation of that space should become a part of a code within the confines of the respective culture (Garroni, 1980). That is to say, a particular spatial articulation should become part of the langue (general social language) of that culture at that particular point in time.

In general, it is accepted that there are three fundamental codes of architectural expression (Garroni, 1980). Technical codes refer to those elements of architectural engineering that are able to broken down into such components as columns, supports, flooring systems, beams, insulation and so on. At this level of codification there is no level of communicative content. Rather, the articulation can be classified as being of the first position, and the function as structural or logical.

Syntactic codes are exemplified by typological codes concerning the articulation into spatial types. Such codes are generally concerned with plans and their respective ordering (or else this may refer to occurrences such as staircases rising to second levels that do not exist). Certain elements of spatial ordering follow certain very generalised rules of execution. Semantic codes represent the significant units of architecture, or the relations established between individual architectural sign vehicles, architectural syntagms and their denotative and connotative meanings.

It would seem that, with what has been offered in term of codes and codification, they may in fact act more as prescriptions for architectural design, and the resultant artefact, rather than as a means of freedom of expression. An architect is charged with providing a built environment that is fresh and unique while simultaneously providing an environment that is decipherable by its patrons (Broadbent, 1990). This leads to the conclusion that in order for codes to be effective, in the free expression of changing cultural values, architects must continually challenge codes and deviate from them, in order to allow for growth, both in terms of the culture expression and in terms of the codes themselves (Garroni, 1980).

2.3 Iconic Sign Systems of the Built Landscape

Geoffrey Broadbent (1980) argues that there are a number of 'types' when describing the techniques or process that an urban designer undertakes in producing three-dimensional forms. These include design processes entitled pragmatic, iconic, analogic and canonic (Broadbent, 1980). Pragmatic design may be described in much the same way as technical coding, i.e. the preferences are for available materials. Generally this is referred to in terms of a pre-historic setting where the definition of available materials means animal skins, bamboo reeds, leaves, branches and so forth. However it is still possible to refer to such design today. In doing so it means referring to such materials as plastic skins, suspension structures and so on.

Iconic design refers to the process where the urban designer engages a fixed mental image of an already established solution to address the design task that faces him, whether that be producing shelter or some other purpose. This is often referred to as producing the vernacular or operating within a 'primitive' framework. As a result, many urban designers and architects diverge markedly from this mechanism of design, opting for a process that enables them to go beyond mentally and culturally prefabricated forms.

Analogic design refers to architectural designs that draw upon existing forms either in nature or the human experience. This could mean that images or the likeness of certain aspects of a forest (branches, leaves etc.) could be incorporated into the form of an architectural artefact (building). This could also mean that the form could be drawn from another body of study or work, such as the arts and sciences.

Canonic design refers to forms that are created with a superior knowledge of geometry and two and three-dimensional geometric articulation. This is perhaps most easily seen in the works of Islamic art and architecture and even as far back as the Egyptians right through to the Renaissance.

Essentially, these various means of communication - or types as Broadbent refers to them, comprise a language in which an urban designer or architect can communicate with an observer or patron of a particular material object or urban space. In using this 'language' it is understood that there is a social contract between the user of the space and the designer of the space (Broadbent, 1980). This contract is an agreement as to the clues that will be provided, within the material object or space, to make that object or space both readable as a primary functioning object and a secondary functioning object. These clues can be described as varying degrees of iconography.

If one follows the breakdown of iconographic communication as is set out by Peirce (Broadbent, 1980) then one sees that there are three degrees of iconic communication. The first, and the most clearly represented, is the icon. The icon is the sign itself, or very fundamental minor signs within a major sign that relates some basic resemblance to the signified. In other words signifiers become classified as icons when they closely resemble their signifieds. Symbols are of a lesser degree of resemblance than icons, but nevertheless contain visual clues that are relatively basic and forthright in relation the identity of the signified. Often this may take the form of words within a visual sign, or standards of some kind, such as a flag.

Then there is the index. The index is the least of the three communication devices with respect to clear signals of the signified's identity. An index refers to a sign that communicates its idea in terms of causation (Broadbent, 1980). That is to say it will not necessarily visually represent the likeness of the idea, nor will it necessarily provide symbols. Perhaps the easiest way to represent 'index' is in terms of a symptom. In a scenario where there is a person lying in bed suffering from a fatal jungle fever, the observer is able to break down this image or sign into its various degrees of iconic communication. The image of the person lying in a hospital bed could be read as an iconic sign for 'patient' or 'sickness'. The chart at the end of the bed that says General Hospital, or the painting of the caduceus over the patient's bed, could be read as symbolic signs. An indexical sign would be read as the pale green colour of the bed sheets that is so often associated with hospitals, the feeling of emptiness that a hospital ward so often has, or the pasty look that the feverish patient has on his face.

This social contract of iconic communication is necessary if people are to interact with their environment in a comprehensible way (Broadbent, 1980). People learn early on to associate certain qualities of objects with the object itself. This process is necessary for people to go about their daily lives without having to reinvent the wheel every time they see a new version of it. That is to say that many wheels look different but all wheels have a certain 'wheelness' to them to communicate to people that it is in fact a wheel. The communication of this 'wheelness' is done through the aforementioned iconic signs.

Signs can be classified according to their degree of defining attributes based on one's observations. Bruner has suggested three categories to properly distinguish between these degrees of iconic attributes (Broadbent, 1980). The conjunctive category is determined by the joint presence of certain attributes, each

present at an appropriate value. All books have pages, a spine and a cover. If one recognises these attributes then the object is likely to be understood to be a book. If a book were to be missing a spine or cover or pages, it would make it difficult for the observer to understand the object as a book.

The second category is what Bruner calls the disjunctive. Here the attributes represented are broader in their sense, and it may not be necessary for an object to have all the attributes. For example, all mammals have four limbs and a certain amount of fur. Human beings are mammals, but they could hardly be called furry.

The relational category is made up of object that have even fewer attributes than the disjunctive, but those that do exist are always in the same relationship to one another. In the identification of a Christian church one expects to find a nave, a tower, a spire, a porch, aisles, an altar, an east window and pews. Indeed if in fact an object had all of these attributes then it would be unmistakably and, more to the point, conjunctively, a church. But in terms of its relational attributes, it could be quite likely that an altar, nave and a porch, set in their normal positioning (relationship), could be enough to communicate the idea of church. This would be the case with Le Corbusier's modern church at Ronchomp. While there is only the presence of the nave, altar and porch (in their correct relational orientation), the structure is nevertheless read as a church.

2.4 Spatial Organisation, Archetypes & Place-Making

More often than not when the subject of place making is introduced into the semiotics of urban space one inevitably starts talking about archetypes and the spiritual meaning of particular forms, spaces and places. Archetypes are generally accepted as spatial or experiential entities that have entered the subconscious, and as Jung has explained, become parts of our inherited memory (Brill, 1994). In this respect it could be argued that archetypes contribute to our understanding of the built landscape and how we represent ourselves through it.

Archetypes constitute a dimension of understanding of the built landscape that does not directly respond to the tenets of semiotic analysis but nevertheless can be analysed in terms of their communicative meaning. Generally, archetypes are representations of particular forms, shapes and spaces that may act as

triggers or stimuli for many people (Brill, 1994) i.e. a particular place may evoke a particular feeling from a number of different people. Whether this is the case or not, the feelings that a place can evoke from a person can range from the tame to the strongly emotional. The usefulness of this in the act of place making can therefore prove to be a critical process.

Place making in its currently used sense may be somewhat of a misnomer. In other words, at least where design is concerned, place-making is not necessarily a specific process that is undertaken, like a recipe, to produce a space that will evoke just the right amount of feelings to make a place memorable or worth revisiting. Places are being created all the time, and for the most part it is not through specific urban design interventions. Truly interesting places that stay in the hearts of the visitors are places such as little Italian cafes on the corner of some winding narrow street. A couple of tables and chairs, the light of the setting sun in the evening as it lights up the side of some little home with brightly painted window sill, a charming waiter - and this is certainly enough to create a memorable place. No major urban design intervention was necessary to generate a genuine feeling of place in this example.

But this is by not to say that there are not a number of things occurring at this place that an urbanist can examine and learn from. There is in fact a language in operation in place making. The level of ambiguity is certainly higher than in deconstructing architectonic languages through semiotic analyses, simply because deconstructing feelings and emotional responses to particular forms and spaces has not, or rather cannot be, necessarily empirically treated. However there are certain things that have been analysed and can be applied in a conscious way to create places that can positively effect a human response.

2.4.1 Mythical Places

There seems to be a world-wide set of common myths, ones that have very similar basic structures while differing largely in specifics (Brill, 1994). For the most part it is understood that it is the culture or location (religious etc.) that is normally experienced, and not the myth itself.

To try to come to an understanding of such places in term of semiotics it may make sense to return to an example that was used in an earlier section. If one looks at the Christian church through semiotics eyes then the object is read in term of its parts and its role as cultural medium. For an archetypal analysis

one has to look at the church as a whole, and rely more on the emotional sensation that is evoked by this object, rather than particular messages that may be encoded within it. The emotional response is however a reaction to a type of coding but, as mentioned earlier, in a much more ambiguous way. The church can be read obviously as a spiritual place, but more accurately the monumentality of the object (its size), its verticality, solidity, change in massing from heavy to very light and so on, are all qualities that contribute to an observer's awe and feeling of something greater than himself (Brill, 1994).

This type of emotional or sensational response is the very basic message that an archetype carries with it. In terms of place making this sensation or response can significantly influence one's understanding of a place or object within that place (Brill, 1994). In doing so, the reading of what have been discussed as semiotic signs could arguably acquire meanings that are considerably different than without the response evoked by the archetypal form.

2.4.2 Essential Qualities

While it is generally agreed upon that the communication of archetypes is simply too ambiguous and complex to be broken down into the same tenets as a formal language, as semiotics does with the built environment, it is possible to conceive the qualities that produce 'places' of particular note (Brill, 1994).

- **Order**
- **Rhythm and sequence**
- **Centre and boundary**
- **Dimensions and sizes**
- **Scale relationship**
- **Geometry and shape**
- **Mass and hollowness**
- **Enclosure and openness**

All of these qualities are present in all spaces in varying degrees of significance, but play a paramount role in places that engage the mythic themes that so clearly evoke archetypal (emotional, spiritual etc.) responses (Brill, 1994).

2.4.3 Dialectics

Brill (1994) refers to the tension that exists between diametrically opposed archetypes as being critical to the formation of place. But rather than accepting these opposites as contrasting pairs in a polar sense, he views them as distant ends on a continuum that has the two inherently linked. The most basic of these pairs, that Brill views as being essential to archetypal place-making, is the tension that exists between the body and the soul; the soul, infinite, intangible, immortal; the body, solid, finite, feeling and grounded. Brill refers to the tension between such points on the continuum as a *dialectic*. It is within this dialectic that the tension that makes great places can be found (Brill, 1994). An obvious example of this can be seen in the pyramids of Egypt. The pyramid is a tomb, which sinks beneath the earth, and simultaneously is in tension with the sharp verticality of the pinnacle that is reaching up to the heavens. It is both a place of burial and a place of ascendance. This kind of spiritual tension is what Brill calls the dialectic that makes great places.

This dialectic is understood from observing, and responding emotionally, to the whole of the pyramidal structure. This, of course, is in contrast to the semiotic reading of the object that would ultimately break down the structure into its respective sign components and derive meaning from each component and its relationship with other components and then with the observer. This is probably where the starkest difference lies between archetypal responses and semiotic readings. As discussed earlier, the reading, observation and response associated with signs (semiotic interaction with the built environment) is based on a functional, learned relationship that an individual develops over the course of their life. Archetypal responses are generally not learned nor, are they traditionally associated with specific functions (Brill, 1994).

2.5 Urban Semiotic Analysis (Points, Lines, Planes and Time)

Alexandros Lagopoulos (1986) has adopted a socially based typology of cultures as the basis for his comparative analysis of the semiotics of settlement space. Lagopoulos views an individual society as what he refers to as a global social structure (formed both by economic and social factors). This structure results from a dialectic relationship between two planes, the social base and the superstructure. The social base

itself can be divided into two planes: productive forces (infrastructure) and the social relations of production (structure). The superstructure can be divided into a demographic plane, institutions, ideologies and other social products (Lagopoulos, 1986).

While the relationships between the various planes of the global superstructure are dialectical (contradictory), these relationships nevertheless constitute a unity or parts along a continuum. Lagopoulos (1986) believes that understanding the relationships between these planes, that is the dialectics, is the equivalent of understanding the laws that govern the global social structure.

At the heart of the governance of these laws is the 'mode of production'. A definition of this term may be as narrow as to exclude the base itself, or as broad to include the base and the political ideologies of the superstructure. Lagopoulos (1986) challenges the Marxist viewpoint that the global social structure is determined solely by the forces that guide its mode of production. He sees these forces being partially formed by the dialectic that arises between the productive forces of one society's global social structure, and the productive forces of some other global social structure. If this is the case, the influence that arises from the external global social structure will invariably be filtered through the social environment of the original global social structure (Lagopoulos, 1986).

The formation of the global social structure created by the joint action of the dialectic and the productive forces is what accounts for the presence of dominance or structural hegemony for particular planes within the global social structure (Lagopoulos, 1986).

Lagopoulos (1986) classifies urban space and its organisational ordering as a plane within the superstructure that he has called 'other social products'. He further defines urban space as the projection of spatial functions (socially defined uses of space), which belong to the superstructure, into *geographical space*, followed by the construction of *shells* for functions and of *circulation networks* (Lagopoulos, 1986). With this understanding, urban space can be divided into three processes that symbiotically work to form urban space, while having urban space work to advance these processes. These three processes are as follows.

- **Socio-economic production of real space**: a process that begins in the base and directly influences space;
- **Political production of space**: a process that begins in institutions;
- **The ideological production of space**: a process beginning in ideologies.

While the first two processes deal with the constitution of space and typically the process of state planning, respectively, the third is critical to the semiotic production of urban space. This variation of a semiotic analysis of urban space production differs somewhat from what has been thus far set out as a semiological analysis. That is to say the focus here is on the processes of production of space and how they signify cultural ideologies. However, comparisons can certainly be made. The signifieds, to which the set of signifiers refers, in the aforementioned semiotic analysis, as well as in the semiotic analysis of the processes of space production, both refer to the ideological plane.

2.5.1 Modes of Production

Though global social structures illustrate an immense diversity from culture to culture, Lagopoulos (1986) contends that there are a limited number of types into which these structures can be classified. These classifications include the following.

Modes of production in classless societies

- **Communal mode of production**: hunting, gathering, herding or a rudimentary form of agriculture; social organisation is based on kinship systems, with property of the soil being communal; where the 'state' does not yet exist.
- **Germanic mode of production**: developed form of communal mode societies; property of the soil is combined with private property.

Modes of production in societies with embryonic class structures

- **Asiatic mode of production**: developed form of agriculture; social division of labour is more developed; presence of new economic conditions leads to social stratification and a dominant group that controls an elementary form of state; people are subject to forced labour; slavery is present; communal property and private property coexist; owner of the soil is typically the king.

Modes of production in class societies

- **Antique mode of production**: economy founded on agriculture and commerce; slaves used for domestic services; communal and private properties coexist.
- **Escavalgist mode of production**: evolved form of the Antique mode of production; slaves are employed in intensive production.
- **Feudal mode of production**: economy based on agriculture and commerce; dominant social class is hierarchically organised; majorities of 'producers' are in a state of serfdom; rights are given to serfs to use the soil, but the ruling class owns soil.
- **Industrial mode of production**: without making the division between socialist and capitalist societies, it is possible to say that both are founded on industry and industrial development; socialist and capitalist societies differ primarily on the plane of the relations of production, between the dominant classes (the capitalist and the state bureaucracy).

2.5.2 Urban Models

This section deals with the material referred to as urban models. Communal, Germanic, Asiatic, Antique, Feudal and Industrial modes of production, as they relate to the formation of urban space, are discussed in this section.

2.5.2.1 Communal and Germanic Modes of Production

Collectively, the connotative codes that are used in the organisation and construction of a settlement comprise what Lagopoulos (1986) refers to as a 'model of social origin'. This model is used by a majority (if not the whole) of the settlement population when undertaking the construction of their built landscape. It can therefore be understood that the spatial organisation and construction of the settlement is achieved through a consensus of the settlement's population.

In this model, connotative codes are of key importance, while the role of denotative codes seems to simply follow (the connotative codes). Lagopoulos (1986) relates the conceptual semiotic model of such a settlement space to the semiotic production process. Since there is believed to be such a strong link between the mythological plane that generates the ideas for urban space, and the actual connotative signs that make up and organise the space, such a settlement demonstrates qualities of 'stability' and 'recycling'. This becomes apparent if the settlement is changed in any way (social, economic, political factors) then a social intervention will likely occur to restore the semiotic model of urban space. This, of course, is understood within the confines of historical context, and is done if circumstances permit.

Lagopoulos (1986) has analysed the connotative codes of such settlement space and has found that they tend to be characteristic of analogic thought. Furthermore, such analogic thought seems to typically show examples of religious and cosmological connotations. This semiotic model governs both the organisational principles of the settlement's space, and the material objects that are located within that space (Lagopoulos, 1986); thus, architectural, regional and even iconographic organisation of space are all governed by these connotative principles.

2.5.2.2 Asiatic Mode of Production

The Asiatic mode of production is essentially a communal mode of production that has undergone some type of evolution (Lagopoulos, 1986). While much remains the same, the Asiatic mode modifies its social and economic factors. In doing so, the ruling class gains advantages over the rest of the populace. The summit of this ruling hierarchy is embodied in the character of a king, who is regarded as the organisational centre.

While the newly transformed mode of production continues to operate much like the old, the connotative codes are altered by the operative framework, thereby giving new meaning and a new ideological function to the urban model (Lagopoulos, 1986). The new framework brings with it (as already stated) changes in economic, social and political functions. But it is important to note that these changes appear in the formation of the settlement space, not as the development of communal villages, as before, but in following the hierarchical system of rule, in the development of royal cities. The proliferation of such urban space contributes to the glorification of the king, and further promotes the new political codes (political and royal being offered as similar in character).

The position of the king is of particular importance to such societies. The king plays a key role in the development of the ideological plane and in turn, in the development of urban space. This is typically achieved through the deification of the position and the added importance placed on his role as centre of society, centre of religious activity, and in a divine way, mediator between heaven and earth.

For the most part the semiotic urban model of space in the communal mode and in the Asiatic mode are very similar. The differences arise in the fact that the royal figure has, by and large, expropriated the qualities of this (communal mode) model for his own position, thereby altering the ideological connotations (Lagopoulos, 1986). But in terms of cosmological and religious codes of spatial ordering, the qualities are very similar.

2.5.2.3 Antique and Esclavagist Modes of Production

The presence of these modes of production has only appeared in two societies during the course of history, ancient Greece and Rome (Lagopoulos, 1986). While based on the Asiatic mode of production, these modes display notions of 'centre' and the world along a cosmic axis in a somewhat different way. Here the notion of the world is conceived as circular, with a sacred heart (centre), called the megaron. This idea of the megaron (a Mycenaean example) seemed to correspond to the notions of a circular or spherical world promoted both by Homer and Hesiod (Lagopoulos, 1986).

The transformation to the antique mode of production was characterised by changes in the plane of the social base (Lagopoulos, 1986). Emphasis had now moved to commerce and manufacturing and, with

this, the development of a monetary economy rather than a natural economy (barter). Additionally, this development saw the separation (widening of the gap) between the political plane and the religious plane, which prior to this had been joined (see Asiatic Mode of Production above). This would prove to be a pivotal point, as this separation would ultimately lead to the development of rational thought.

The development of rational thought led to the formation of the basis of philosophy (Lagopoulos, 1986). This meant that the relationship a rational thinker had to cosmology, for example, would be significantly altered. The example of the Greek *polis* perhaps best illustrates this type of rational conception of space. While still demonstrating the form of the cosmological code, the circle with the centre (hearth), the organisation is very different. The polis is organised around the agora, the economic, civic and political centre of urban activity. Therefore, what is occurring is the meshing of two different means of organisation, and two different codes. Moreover, with the shift to rational thought, the meshing of the two codes eventually led to the dominance of the political (embodiment of rationalism) over the cosmological code. An analysis of the circular formation of the polis then is not one of Homerian cosmology, but one of public equality (embodied as equidistant locations to the centre of urban activity).

Rational thought continued to change the relationship toward the semiotic urban model, i.e. this mode of production was differentiating itself from the models that had preceded it (communal, Asiatic). Rather than drawing upon a relationship the settlement (society) had with 'the world', emphasis began to be placed on abstract numbers and pure geometry (Lagopoulos, 1986).

2.5.2.4 Feudal Mode of Production

For the most part, it is considered that the feudal mode of production was in fact a form of regression, at least in terms of the semiotic urban model (Lagopoulos, 1986). This period was marked by the recurrence of the dominance of the cosmological and religious connotations that were prevalent in the communal and Asiatic modes of production.

Perhaps the best example of such regression is what appeared in terms of spatial organisation in north western Europe in the Middle Ages. In German towns, a means of spatial planning was used that emphasised the importance of religion (the cross) and cosmology (stepped stone markers – connoting the

'centre'). Characteristics of this semiotic urban model, to a large degree, represent those present in the communal and Asiatic modes of production (see above).

2.5.2.5 Industrial Modes of Production

Settlements of this type are normally characterised by the appearance of a primitive accumulation of capital (Lagopoulos, 1986). Such settlements are considered to connotatively relate to the 'world' only through forms of analogy that are thought to be generalised, abstract or weak. Moreover, religious and cosmological connotative codes were either gradually disappearing or already gone. Marxists, human ecologists, social scientists and city planners used new connotative codes and urban models to formulate a new approach to the development of urban space. This new, metalinguistic approach to the city, together with rational thought, marked the shift from the ideological plane to scientific urban theories (Lagopoulos, 1986).

Choay (1965) describes three main models for urban space that characterise the industrial mode of production, the progressivist model, the culturalist model and the naturalist model.

The progressivist model is divided into three phases. Each phase of this model is guided by an ideology of rationalism. This ideology leads to the primacy of functionalism, rationalisation of aesthetics, efficiency, productivity, health, and technology. The point of view is adopted that individuals are substitutable and, moreover that an individual's needs are universal. As a result, the urban space that reflects this type of ideology is inflexible, functionally segregated and with imprecise limits (Choay, 1965).

In direct contrast to the progressivist model is the culturalist model. Here the model is guided by an ideology of nostalgia for the past. As a result, aesthetics are linked with tradition, and culture is privileged over materialism. Furthermore, technology is viewed as an undesirable means of development. At the individual level, emphasis is placed on the urban community and the individual is regarded as 'unique'. Urban space that results from such a model is viewed as specific and with precise limits (Choay, 1965). Lagopoulos (1986) contends that urban space resulting from such models is not in fact part of semiotic connotation, but rather a part of a scientific metalanguage.

The naturalist model is guided by nostalgia for nature. Perhaps the best example of this model type is Frank Lloyd Wright's Broadacre City. While founded on technology and individualism the need for efficiency and productivity is absent. As a result urban, form associated with this model emphasises the continuity with nature and de-emphasises urban constraints (Lagopoulos, 1986).

Urban space that is produced in industrial societies is founded on what Lagopoulos (1986) calls extra-semiotic processes (beyond semiotics), and ideological elements that are not typically associated with a semiotic urban model. Furthermore, the ideological production of space can be said to be restricted by scientific and technical data and existing social and economic conditions. This process can also be classified as alienated due to the fact that it follows the social and economic base. Lagopoulos (1986) thus believes that the ideological production of space in industrial societies represents a strong desemantization or urban space, at least by comparison with non-industrial societies.

CHAPTER 3
TERRA INCOGNITO

3.1 Uzbekistan

The area that is now Uzbekistan was incorporated into the eastern satrapies (Persian provinces ruled by a satrap – or emir) of the Persian Empire in the 500s BC. These satrapies were known as Sogdiana, Bactria, and Khorezm. Macedonian leader Alexander the Great conquered the region in the early 300s BC, but Macedonian control lasted only until Alexander's death in 323. In the 100s BC, part of present-day Uzbekistan was included in the vast empire of the Kushanas. These were descendants of a tribe from western China. At this time the region became an important part of the overland trade routes, known collectively as the Silk Road, that linked China with the Middle East and imperial Rome.

In the 3rd century AD the Sassanid dynasty of Persia gained control over the region of Central Asia. Nomadic tribes from the north invaded between the 4th and 6th centuries, and the Western Turks gained the most extensive control over the region. In the 7th and 8th centuries Arab invaders conquered present-day Uzbekistan and introduced Islam. In the 9th century a Persian dynasty, the Samanids, emerged as local rulers and developed Bukhara as an important centre of Muslim culture. The Samanid dynasty declined in the 10th century and a number of Turkic hordes competed for control until the great conquest of Mongol emperor Genghis Khan in the 13th century. In the 14th century the area was incorporated into the empire of the Turkic conqueror Tamerlane (Timur Lang), who established the Timurid dynasty. Tamerlane made Samarkand the capital of his vast empire in 1369, establishing it as a magnificent imperial capital. Tamerlane's grandson Ulug Beg emerged as the ruler of Samarkand in the early 1400s.

During the 14th century, the nomadic Turkic-speaking tribal groups of Orda, Shiban, and Manghit, who inhabited the steppes of what is now Kazakhstan, formed what is often referred to as the "Uzbek" (also "Uzbeg" or "Ozbek") confederation. From 1465 to 1466 a group under the Uzbek chieftains Janibek and Keray started a rebellion against the khan of the confederation, Abul Khayr (1428-1468). This rebellion lasted until 1468, when the khan was killed. This group began to call themselves *Qazaqs* (or Kazakhs). In part because of the defeat of Abul Khayr, nomadic clans from the Uzbek confederation began to move

south into what is now Uzbekistan (known then as Mawarannahr) in the late 15th century. These groups not only engaged in raids on settled areas but also conducted a substantial amount of trade.

In the first decade of the 16th century, Timurid authority collapsed when Mohammed Shaybani, grandson of Abul Khayr, seized Khorezm, Samarkand, Bukhara, and Tashkent. The conquered lands became two separate khanates, one centred in Bukhara, seat of the Shaybanid dynasty, and one in Khorezm, seat of the rival Yadigarid dynasty. The Shaybanid dynasty reached its zenith of power in the late 16th century under Abdullah Khan. After Abdullah Khan's death, power in Bukhara passed to the Janid dynasty.

During the 17th century Uzbeks continued to settle in present-day Uzbekistan, primarily in the oasis areas of the east that were already inhabited by Turkic and Persian speaking people. In the west, a Turkic-speaking people called Qoraqalpoghs inhabited the Amu Darya delta by the 18th century. A new dynasty in Khiva (as Khorezm had come to be known) forcefully incorporated the Qoraqalpoghs' homeland into its khanate in 1811.

Meanwhile, the Quqon (Kokand) khanate was formed in the Fergana Valley in the early 1700s. In 1740 Persian forces under Nadir Shah invaded Bukhara and then Khiva, conquering both territories. Persian control was short-lived. It ended with Nadir Shah's death in 1747, and the Janid dynasty never recovered. Uzbek clans succeeded in ousting the Janids by the late 18th century, creating three states ruled by rival Uzbek dynasties. The Kungrats were enthroned at Khiva, the Manghits at Bukhara, and the Mins at Quqon. The Manghits ruled as emirs, making Bukhara an emirate, while the other two dynasties established khanates. Although distinct borders were never drawn, these three states dominated the area roughly corresponding to present-day Uzbekistan, or the area between the Amu Darya and Syr Darya rivers. Bukhara was centrally located and included the cities of Bukhara and Samarkand. Khiva was farther to the west in the area of the Amu Darya delta. Quqon was centred in the Fergana Valley in the east. In the early and mid-19th century, the khanate of Quqon expanded into the Tien Shan Mountains in the east and the Syr Darya basin in the north.

3.1.1 The Development of Turkistan

From 1850 onward the primary cultural, economic and political sources of influence and change in Central Asia could be found in the governance of Tsarist Russia over the peoples and Khanates of Central Asia (Nilsen, 1998). From this date (1850), the Khanates of Central Asia became collectively known as the Tsarist State of Turkistan. The three Khanates that made up this new state included those centred around the cities of Bukhara, Khiva and Kokand.

The Tsarist Empire recognised at this time that the conflict that had existed between these three Khanates was enough to allow a political and economic intervention that would result in Russia gaining the upper hand (Nilsen, 1998). The Tsarist process of colonisation was fairly typical, at least in terms of initial procedures and the infiltration of the subject culture (Nilsen, 1998). Ultimately the Tsarist regime relied on the fact that there was political instability in the region before even contemplating any means of subjugation. For the most part the region was colonised on relatively peaceful terms.

There had been Russian settlers in the region of Central Asia long before the mid- nineteenth century. This would eventually prove to be an asset in future cultural integration. Typically, and as proved to be the case in Central Asia, colonisation began from the top and worked its way down (Nilsen, 1998). Initially the Russian colonial bourgeoisie found common ground, in terms of cultural values and political and economic interests, between themselves and their equivalent counter-parts in these Central Asian Khanates. Since the region had been suffering from an economic crisis that started near the beginning of the eighteenth century, finding common ground and interests that could be agreed upon proved quite simple (Nilsen, 1998).

In addition to the economic crisis, from 1600 to the beginning of the nineteenth century periodic and sporadic wars and military conflict plagued the region. The conflict was a result of the political and economic differences that existed between the three Khanates. Here too proved to be another opportunity for the colonists to intervene, and direct the situation to their benefit. As a result, the Tsarist regime stepped in and seemed to rather effectively resolve the pressing political problems, thereby bringing peace to the area. In doing so this proved to be yet another 'foot in the door', since the release from these feudalist wars meant the institution of Russian, and more to the point contemporary European, laws and values in Central

Asian political and economic cultural frameworks (Nilsen, 1998). It was in the initial stages such as these, that the area of Turkistan began to be officially recognised as a Tsarist colony.

3.1.2 Colonialism in Turkistan

Toward the end of the 1880's the colonial state of Turkistan began to take more concrete form, both geographically and in terms of its political economy. The general administrative responsibilities of the region were now assigned to a Gubernator, an executive of the state sent to Turkistan from among the Russian bourgeoisie. The position was to be stationed in the (until now) relatively unimportant city of Tashkent. Prior to this point in history, Tashkent held no important political or economic role in any of the three Khanates of Turkistan (Ziyayev, 1987). With the arrival of the Gubernator and the importance of colonial administration, Tashkent's importance both politically and administratively rose dramatically. Tashkent's new role was as administrative capital of the colony of Turkistan, and as a result, politically one of the most important cities in Central Asia.

The administration of the colony was not entirely based on unilateral decision making. The administration of the colony was divided into international and military affairs, which were handled by the Russian councils, and most internal matters, which were the responsibilities of the respective Khanate councils.

Perhaps one of the most important consequences of this colonisation occurred in the exchange that took place on the economic front between Russian commodity distributors and local marketers (Ziyayev, 1987). The presence of two very distinct groups, adhering to two very different understandings of economics and market activity, in the same trade/commerce arena resulted in some very severe changes in the social structures of the local, as well as the colonial population. Arguably most important among these was the stratification of socio-economic classes (Ziyayev, 1987). The growth of personal and class wealth quickly led to the financial polarisation of social groups, which more often than not coincided with racial classification.

With the growth of financial prosperity there began the development of new cities. In order to connect this economically flourishing area with Russia proper and thereby the 'rest of the world', it was

necessary to construct a railroad that could facilitate the transport and exchange of large quantities of goods. The construction of the railroad, along with the development of a proper shipping network on the Aral Sea, marked the beginning of industrial development in Turkistan (Ziyayev, 1987). For Turkistan, industrial development meant that large quantities of raw commodities (in particular cotton) would be exported, while ready-made goods would be imported from elsewhere.

3.1.3 Terra Incognito

The beginning of Russian capitalism in Turkistan not only marked the beginning of an exchange of goods; it meant the exchange of ideas as well (Ziyayev, 1987). This new exchange brought Russian scientists, archaeologists, historians and others from the intelligentsia's elite. According to Nilsen the aim was to raise the awareness of the local population to European ideology and philosophy, and to raise the awareness of Europe in terms of Turkistan, and a land (and people) formally classified as terra incognito (Nilsen, 1998:13).

While the local population and the colonials were endeavouring to find common ground on most interests, this was particularly true for city planning and architecture. Nilsen (1998) notes that there was a synthesis of ideas and language between local masters (master carpenters, i.e. architect/engineer) and the colonial architects and engineers. This proved to be the case on many occasions, especially dealing with issues of the 'great' historic monuments that had entered into the legends and fables of Russian literature.

Additional efforts were made to enhance the identity of Turkistan for the people of European Russia (Nilsen, 1998). That is to say, in the nineteenth century, Russians were engaging in their Central Asian version of the Grand Tour. Colonial offices published brochures and pamphlets advertising the mysteries and wonders of the Orient. While this budding version of the tourist industry brought a new vision and understanding of Turkistan, it also contributed to the visual arts of the Russian school of arts. Painters of built form, as well as natural landscape came to Turkistan to find subjects and inspiration for their work.

3.2 Architectural and Spatial Development in Tashkent Before 1917

This section of the thesis covers the material regarding the development of architectural and urban spatial components present in Tashkent prior to Communist rule. The section includes a review of urban artefacts and spaces that are both pre-colonial or traditionally Uzbek, and those that were present in the initial stages of colonialism.

3.2.1 Tashkent

In 1865 Tashkent, the capital of Turkistan, had a population of just over 100,000 people. As such it was the largest city in Turkistan, and one of the largest in the Orient (Ziyayev, 1987).

3.2.2 Canals

The provision of municipal services for a centre of this size was becoming increasingly complex (Pugachenkova, 1993). Traditionally, water for sanitation and irrigation within the city was provided by means of a network of canals that brought fresh water into the urban area from a drainage basin that collected melt waters from the neighbouring Tien Shen mountains. The primary canal, the Boz-suw that brought the majority of the water into Tashkent, divided into two lesser canals: Kalkauz canal serviced the northern half of the city, while the Ankhor canal serviced the eastern and southeastern portions of the city. From these two canals, an entire network of minor canals branched off to service the majority of the residential units and urban agriculture located within the city's limits.

3.2.3 Fortification

The city in plan view cannot be considered as having an easily identifiable geometric shape (Pugachenkova, 1993). Rather, it has been described as basically circular with the eastern edge truncated. Forming the boundary and the limits of the urban space was an eight -meter high clay brick wall (see figures 1and 2). This system of wall enclosure provided a means of fortification against armed attack. While such fortifications have been recorded in European centres in much earlier periods, it is more of an

indication of the feudal society that demands such measures than it is a representation of a state of development (Pugachenkova, 1993).

Access to the city was by means of a series of gates or darbaza. Entering the city of Tashkent would mean passing through one of 12 darbaza located at various points along the fortifying wall. The location and name of the darbaza was not randomly chosen. Each of the gates opened up onto a road that led to another major urban or rural centre. So, for example, the Samarkand Gate in the Southwest corner of the wall opened onto a road that led to Samarkand (see figure 11). For the most part, these gates were considered major thoroughfares for the passage of major caravans and other such traffic.

Smaller portals called tyshik were also hollowed out of the wall to allow passage of a less formal nature. In other words tyshik would allow the passage of individuals to the city (a link between the rural and the urban), but not large groups of people or mounted caravans. Additionally, these portals were kept small because as was the practice in time of war or attack, these portals, (between 6 and 7 existed at any one time in the fortifying wall around Tashkent), were closed up with brick to prevent entry by the opposing forces.

In plan the chronology of the city' development can be seen in rather an obvious way. The physical growth and expansion of the urban space can be viewed in much the same way as a tree can be aged according to its rings. The plan of an Uzbek city is, in this way, quite similar with the presence of a fortifying wall.

When growth occurred in Tashkent, two particular processes took place. Firstly the city centre came to be denser. That is to say the concentration of built form in the city centre grew in the same physical space with very little outward expansion. Secondly the remaining portion of the city, in particular the physical limits of the city grew (expanded) outward. In doing so the fortifying wall came down, land was acquired and a new wall was erected. However, such expansion never entirely removed the fortifying, and as a result there remained portions of the wall within the limits of the new boundary. This spatial pattern of development was typical of all major urban centres in what is now Uzbekistan.

3.2.4 Roads

With such expansion of physical territory, the new urban limits would inevitably come to encompass the rural (non-urban) components that lay just outside the fortifying wall. One of these components was the informal network of roads that led up to the city limits. In incorporating these roads into the urban space proper, these new sections of the city would be often characterised by roads that were of a much lower quality than the roads that had existed within the city limits for a longer time (Pugachenkova, 1993). Urban streets and the newly acquired roads differed dramatically in quality and in ability to provide adequate transportation. Once these roads came to be incorporated into the city proper, maintenance was upgraded (see figure 3).

3.2.5 Shakhristan

In the geometric centre of the city, and usually at the highest topographical point was the Shakhristan. The Shakhristan literally refers to the human space of the city. Collectively it refers to the residential core and the cemetery (see figure 4). Together with the bazaar which was usually located adjacent to the Shakhristan, these two components comprised the core of the urban space and definitely the most lively and (in regards to human interaction) the most vital portion of the city (Pugachenkova, 1993). Moreover, all major and minor roads and streets eventually led to this core area.

As was described above, an increase in population was accompanied in part by a growth in physical space. However in the Shakhristan this growth came to have more social consequences than one may first predict (Pugachenkova, 1993).

Growth in population meant that the physical space of the core became much denser. In the Shakhristan this meant that urban space became crowded. Residential space rather than expanding vertically divided into even more refined portions. As families grow (sons and daughters starting their own families) the common practice among Uzbek families is to remain with one's respective parents. As a result the residential space becomes further portioned for the new family. Naturally this meant that construction of residential additions was more often then not necessary (Pugachenkova, 1993). But in preferring to expand horizontally in an already defined physical space with very little room for expansion, this type of

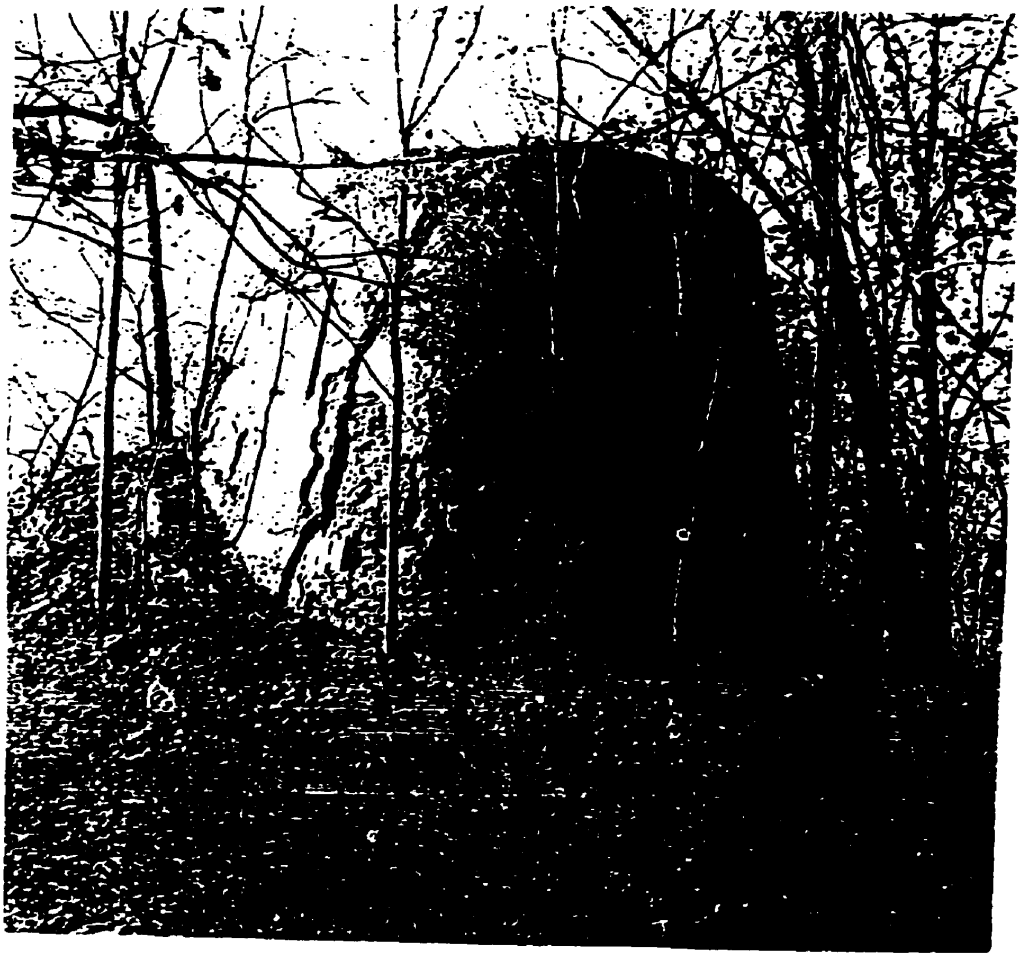


Figure 1. Fortification Walls of Tashkent

Figure 2. Fortification Walls of Tashkent

Figure 3. Typical Urban Streetscape

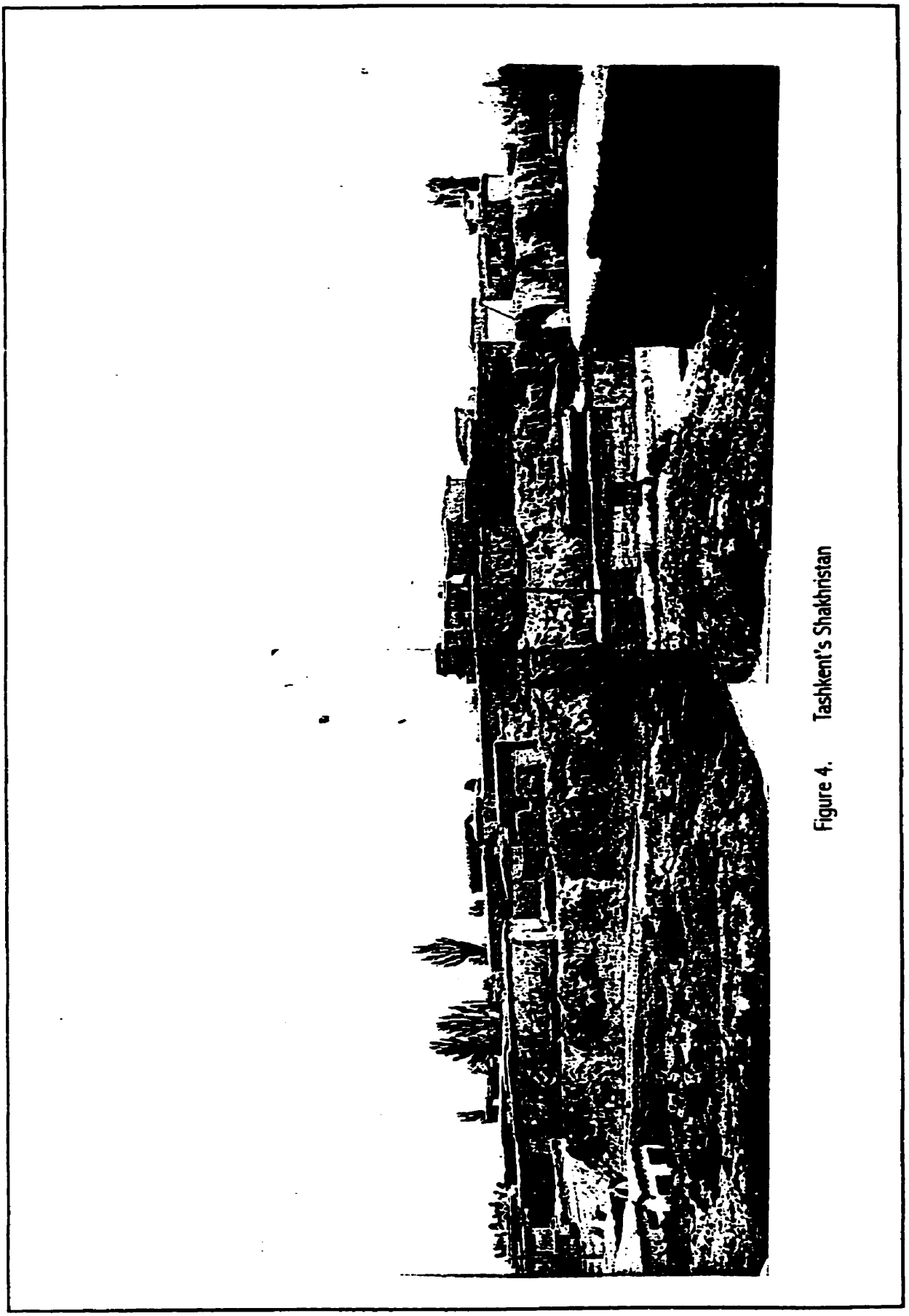


Figure 4. Tashkent's Shakhristan

growth meant the closing off of certain streets, and the building of homes with common walls. The spatial result of this type of growth meant that the general appearance and spatial orientation felt in such an area is one resembles a maze or labyrinth (Pugachenkova, 1993).

Russian engineers and planners at the time felt that this type of urban development was symbolic of poor management that the street network was poor for efficient transportation, and that orientation was problematic (Pugachenkova, 1993). Of

Of course this subjective evaluation was based in a European mindset that privileged the urban grid pattern of development and road management. What this fails to recognise is that while the grid has its own means of visual signals and means of conducting human movement and activity, so too does the 'informal' pattern of development of the Uzbek City.

As one moves through the urban 'maze' one is oriented to location and destination according to the level of density and the presence of certain services (Pugachenkova, 1993). As one moves through the space, the frequency of teahouses, kiosks and the like increased, while the massing of built form became more dense. Furthermore, while the expansion of residential homes led to very narrow, and sometimes dead-end streets, and seemingly confusing paths to follow, the urban dweller was always able to connect with major thoroughfares from any back alley, lane or dead-end. Whether small, narrow or not always visually advertised, the connecting path from one street to another was essential, and therefore always present.

By the end of the 1880s the Russian colonials were making vast incremental strides to change this traditional Uzbek pattern of urban growth to something that was more familiar to the European sensibility (Pugachenkova, 1993). Street names, which had not existed before, appeared, taking their names from the gate to which they led. Street lamps were being installed in all major streets. And the roads that had previously been dirt (but well maintained), were being paved with cobblestones.

3.2.6 The Urda

The centre of the city contained a portion of urban development that has been considered as a miniature city within the city proper (Nilsen, 1998). This essentially political space, referred to as the Urda,

was for Tashkent approximately 1500 hectares in area, and fortified in much the same way as the city proper.

The Urda housed the khan's palace, military barracks, an armoury, and a treasury. Furthermore the Urda contained not only the residence of the khan, but also the residences of the khan's military leaders and political advisors. The Urda in Tashkent was accessed by three gates that were connected by streets to the major gates of the city proper.

Toward the end of the 19th century the city of Tashkent introduced the position of hakim or city mayor to the administrative palette of the city. The position was significant enough that the residence and the political office of this individual came to be introduced into the Urda's urban complex (Nilsen, 1998).

3.2.7 Daha

The city of Tashkent was divided spatially as described above, but divisions of space of a more subtle nature were also present (Ziyayev, 1987). The political division of urban space viewed Tashkent in terms of the Daha: the city proper (not including the Urda) was divided into four administrative quadrants each referred to as a daha.

To each daha was delegated a kazy or judge that was responsible for the administration and execution of the law for the population of the respective daha. Further down the administrative ladder was the aryk aksakal. This was a person that was responsible for the distribution and use of water and access to the urban irrigation network. While this position seems to be of considerably lesser importance than a person responsible for legal activity, the aryk aksakal role is in fact of major importance when one considers the role water and access to water plays in a desert or semi- arid climate (Ziyayev, 1987).

3.2.8 Bazaar

In the northern portion of the city was the bazaar (see figures 5,6,7,8,9). Generally encompassing a rather large portion of the urban space, this city square served both the urban as well as the rural population from areas adjacent to the city.

In the second half of the nineteenth century the bazaar underwent major physical and structural changes. Until this time the bazaar was an entirely informal and loosely managed cultural artefact (Pugachenkova, 1993). By this it is meant that the physical space where the bazaar operated was generally dirty, unhygienic, disorganised, and providing a relatively small selection of goods. Russian colonials introduced a greater variety of marketable goods and a much more formal and efficient manner in which to operate (Pugachenkova, 1993).

Operation of the bazaar peaked on non-work days, that is Saturday and Sunday. On such days the clientele increased immensely. As a result, the colonials introduced European-style shops that lined the borders of the bazaar. Additionally the introduction of such shops meant greater access to foreign goods and more importantly a change in shopping patterns and means of consumption (Pugachenkova, 1993).

In addition to European-style stores, warehouses, textile manufacturing centres, banks and credit unions were established as staples of the new bazaar. While these colonial-based services were gaining ground in the shift in identity of the Uzbek bazaar, the addition of the caravan sarai seemed to be a step closer to a compromise than these other interventions (Pugachenkova, 1993). The caravan sarai was an Uzbek institution that seemed to fit well with the changing demands of the bazaar. Essentially a hotel service for travellers, the caravan sarai served both colonial travellers to Tashkent as well as people from rural areas not immediately adjacent to Tashkent. Such people would bring their wares to the bazaar for the weekend sale, stay in the caravan sarai and return to their villages come the start of the work week.

Even before these changes, the bazaar was much more than a place to trade and sell goods. The bazaar was in every sense a cultural meeting place, and a place to exchange more than just goods (Pugachenkova, 1993). Often people would spend the entire day at the bazaar, gathering with neighbours and exchanging personal as well as city news. The importance of the bazaar as a place of information exchange and social interaction was understood early in its development. Political declarations and speeches from the khan, hakim and other major figures in the city's administration would be addressed to the public at one of the city's major bazaars.

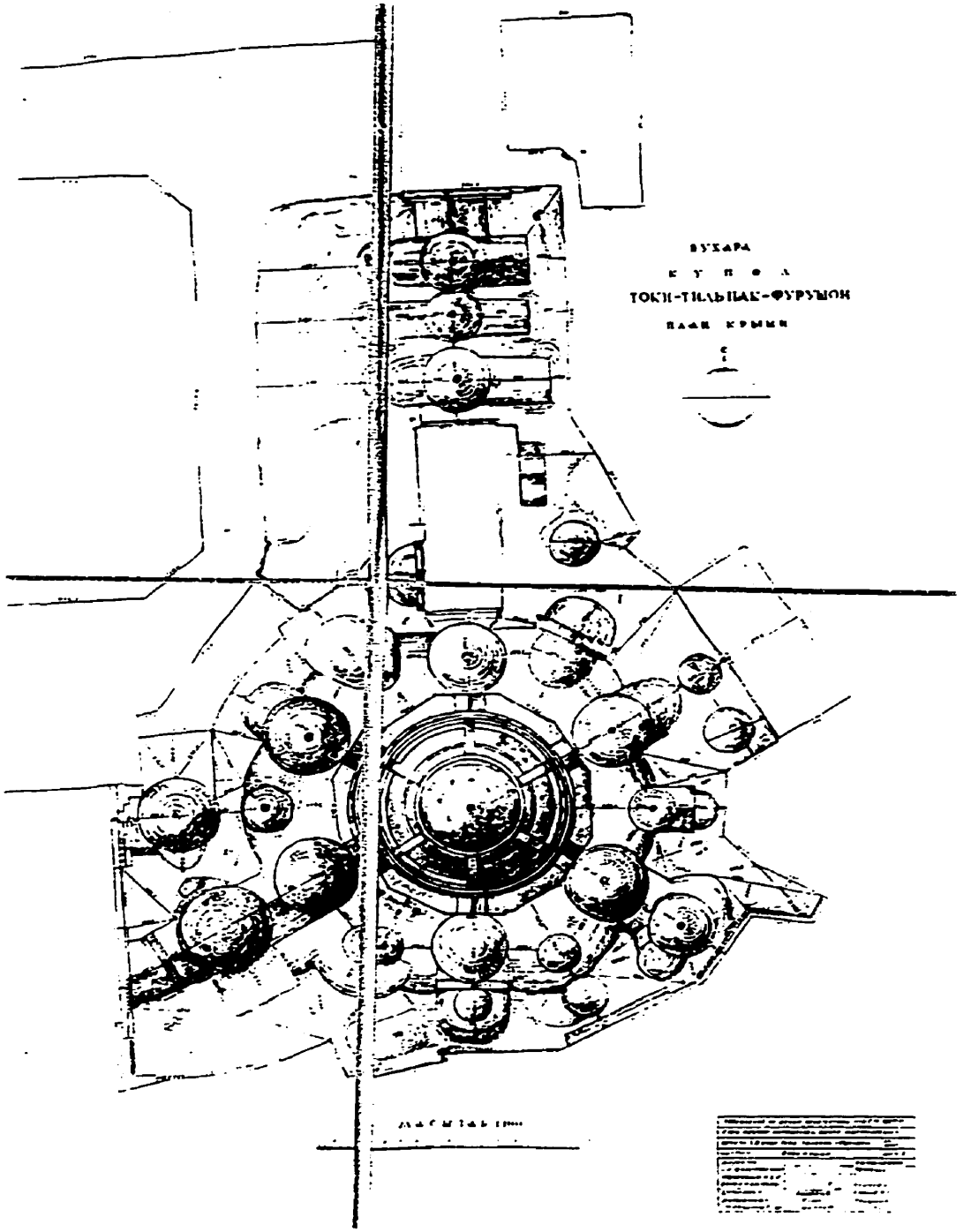


Figure 5. Plan View of Tashkent's Pre-colonial Bazaar

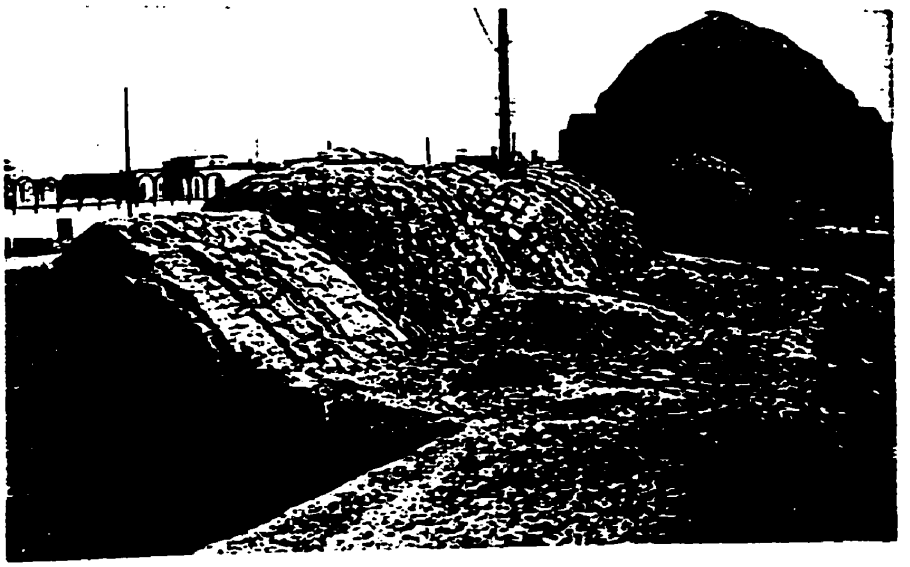


Figure 6. Assorted Views of the Bazaar's Rooftop

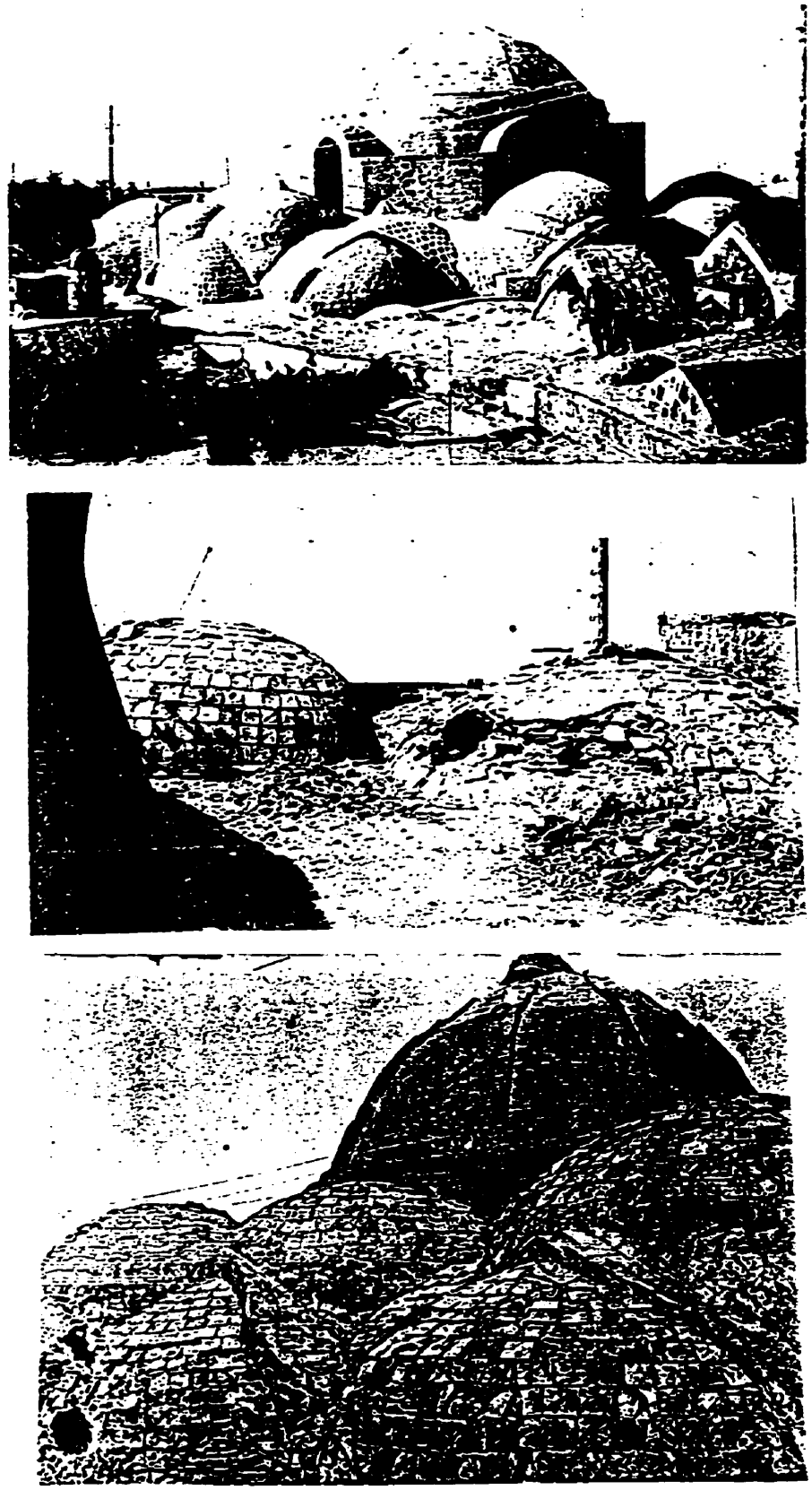


Figure 7. Assorted Views of the Bazaar's Rooftop

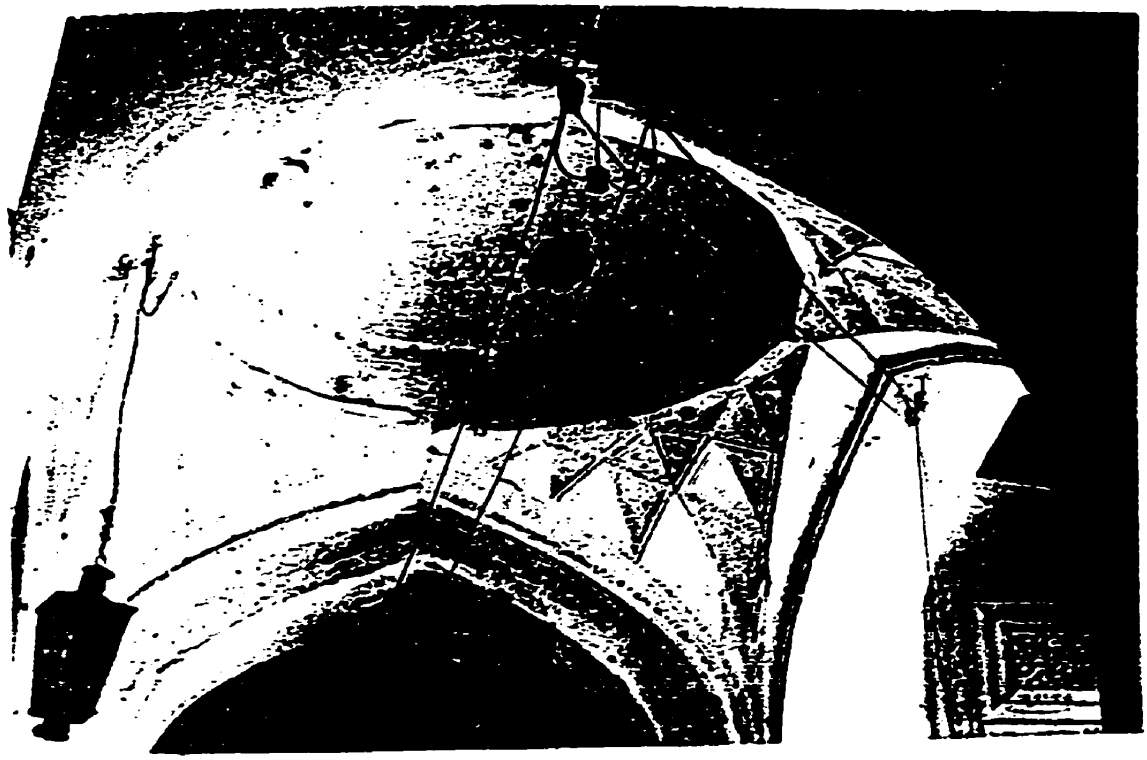


Figure 8. Interior Roofing of Bazaar

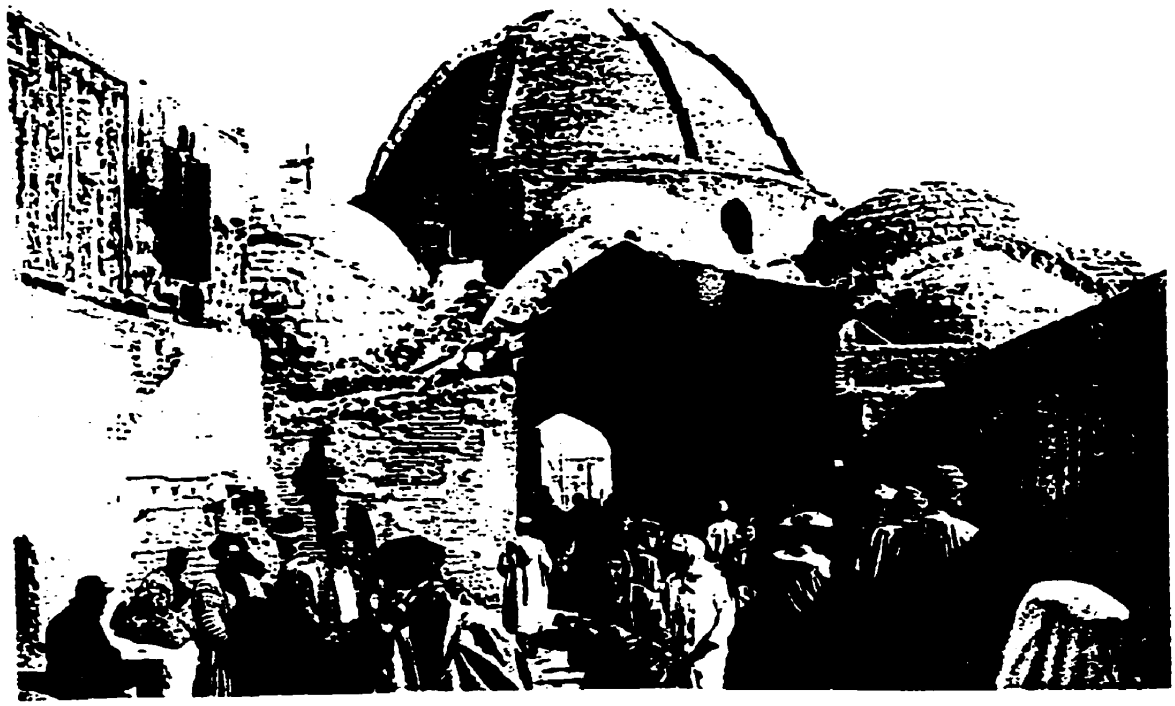


Figure 9. Entrance to Bazaar

3.2.9 Hasti Imam

Another major part of the built form of the city was a building complex called the Hasti Imam (see figure 10). Essentially a complex consisting of a collection of major social and architectural artefacts. Among such artefacts are the madrasah, the mausoleum and the mosque. These were variations on the daily social institutions with which people interacted (Nilsen, 1998). The mosque for instance was not a regular (daily or weekly) mosque. Rather it was a place that was used for worship on special religious holidays. As a result the objects of this space gained special social importance, which was ultimately reflected in their grand scale and ornate ornamentation (Nilsen, 1998).

3.2.10 Mosque

For the most part, mosques did not follow that type of spatial and material expression that was used in the mosques in the Hasti Imam complex. The exterior facades were generally very simple and unadorned (see figure 12). In plan the Uzbek mosque differs somewhat from other mosques in that it responds readily to specific climatic conditions.

The Uzbek mosque is divided into two parts, the summer mosque and the winter mosque. As summer conditions entail extreme temperatures (up to 50 degrees Celsius) worship is conducted in an open-air, covered courtyard adjacent to the winter mosque. The winter mosque on the other hand is typical of the mosques that occur in standard practice (Pugachenkova, 1993).

Interior walls of the winter mosque were never adorned with writings or images or any kind and as a result the interior space remained simple. The summer mosque on the other hand, while adhering to the rules of abstinence of images and writing, manipulated the outdoor space with natural artefacts. Trees, pools of water and latticework were common and expressed a design of intricate geometry typical of Islamic ornamentation.

Figure 10. The Hasti Imam Complex

Figure 11. The Samarkand Gate in Tashkent's Fortifying Wall

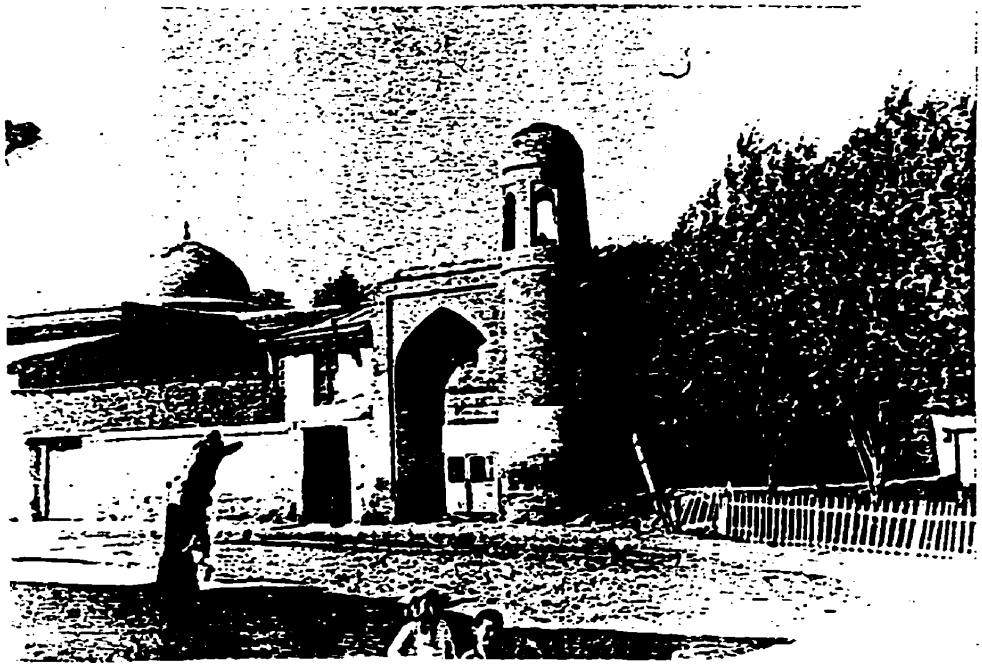


Figure 12. An Uzbek (Tashkent) Mosque

3.2.11 Mauza

Directly adjacent to the city proper, on the other side of the fortifying wall, developed a form of rural settlement referred to as the mauza. Essentially a form of rural settlement, the mauza came to be an important part of urban development in Tashkent (Ziyayev, 1987).

As the urban area expanded beyond its limits, in other words beyond the confines of the fortifying wall, this expansion came in contact with the mauza surrounding the city. When this occurred, the mauza was incorporated into the urban fabric. This transformation meant a number of things both for the human component of this area, as well as for the city proper (Ziyayev, 1987). Firstly this meant that a primarily rural people, with daily traditions and practices that differed sometimes quite dramatically with other urbanites, came to be identified as an urban population. As agricultural practices and means of irrigation changed in response to their urban location, so too did the attitudes of the people (Ziyayev, 1987). For the most part this meant that agriculture as a professional practice or livelihood shifted in terms of social status. In being part of the urban area proper, expectations rose and often after a generation or two agricultural practices diminished to the provision of goods for the immediate family only.

Secondly this meant that the urban fabric of the city proper changed (Ziyayev, 1987). The incorporation of a primarily green space into a space dominated by built form meant that as one ventured out from the core area of the city it was easy to notice obvious and dramatic changes in the urban vernacular. As the methods and styles of rural residential construction differed from the typically urban residential architecture, one could easily discern their location and distance from the core by the appearance of the surroundings (Ziyayev, 1987).

Furthermore, as the mauza and its indigenous communities came to be incorporated into the urban fabric, so too did their village names. It was often the practice to retain the names of the villages of the mauza and apply them to the streets or residential areas, as these places were officially established as sectors of the city. Today such neighbourhood names as Chupanata, Katar-tal, Chilanzar, Dom-rabat, Mir-abad, Unuz-abad, remain and reflect the former villages of the mauza.

As a band of rural development surrounding the city the population of the mauza was by no means homogenous (Ziyayev, 1987). During the colonial period, wealthy Russian settlers purchased plots of land that intermingled with the lands of the indigenous population of the mauza. The colonial attitude toward the

mauza was very different from that of the indigenous populace (Ziyayev, 1987). Russian settlers' preferences to leave the urban area for the summer months, and to spend that time in the 'country' or 'at the cottage', resulted in this area being treated more as a retreat than a sector of human settlement or separate community (Ziyayev, 1987).

3.2.12 Mahallya

Within the confines of Tashkent's fortifying wall existed yet another form of political and social division. The mahallya was initially a form of social division that separated Tashkent's population into distinct districts according either to occupation or on racial grounds (Pugachenkova, 1993). At the start of the 20th century Tashkent's population was divided into more than two hundred mahallyas, most of which were comprised of a homogenous racial group, such as Tojikko'cha (the Tajikistani quarter) or of a homogenous occupational group, such as O'kchi (the rifleman's quarter).

If the mahallya was not based on either race or occupation, it was then based in a major mosque or madrasah located in the area. But regardless of name or basis of identification, the mahallya was a very insular world (Pugachenkova, 1993). The community members of the mahallya, for example would frequent the same mosques, and trade and meet at the same bazaar. Within the tightly knit social structure of the mahallya existed its own form of municipal administration. In this sense the mahallya is very much like the daha, with its administrative leader and irrigation officer. While the daha refers to its administrative leader as the kazy, the mahallya refers to this person as the mirab. Essentially performing the same role, the two positions differ in that the mirab is not appointed by the municipal hakim and acts more as a representative of the mahallya and its cultural or social needs than a governmental delegate separate from the community.

3.2.13 Residential Development

The exterior of the typical urban Uzbek home was by no means a representation of the owner's social status. In fact the contrary is almost true. Great efforts were made by all homeowners to disguise

their personal wealth. As a result residential areas in Tashkent were extremely plain and simple in terms of streetscapes (Pugachenkova, 1993).

Exterior walls, that is those facing onto public spaces, were never constructed with windows or transparent openings of any kind. Moreover, entrances, while certainly varying in size, were constructed in such a way as to prevent passing pedestrians from peering into the interior space. The sole outlet for personal expression of any kind was the entrance gate. Affluence was expressed in relatively simple terms. In other words, size and degree of geometric manipulation were the primary elements for social expression (Pugachenkova, 1993) (see figure 15).

While from the exterior homes remained relatively similar; the size of homes certainly varied, and was also a means of differentiating a family's wealth. Furthermore the means of roof construction and certainly interior detailing and construction, materials used and degree of adornment were all permitted outlets of personal expression.

The house itself was split into two parts, the tashkari and the ichkari, literally referring (respectively) to the exterior and interior portions of the house proper, and reflecting the division of social activity that occurred in the house. The tashkari (exterior or outer) part of the house was the area located closest to the main entrance, and was generally larger in area than the ichkari.

This division of space while originating with the Islamic division of the sexes gained social strength as urban populations grew rapidly at the beginning of the 20th century (Pugachenkova, 1993). Beginning as a means of preventing a male visitor from visual observation of the household's married women, the tashkari kept the visitor separated from the women who would remain in the ichkari (see figure 19). This division of space differed with geographical location. In rural areas agricultural work necessitated the intermingling of the sexes in the work environment (the cotton fields). As a result, that particular aspect of Islamic social code never entered into the language of rural residential construction.

Figure 13. Interior of Uzbek Courtyard House

Figure 14. Uzbek Aiwan - central area of social activity

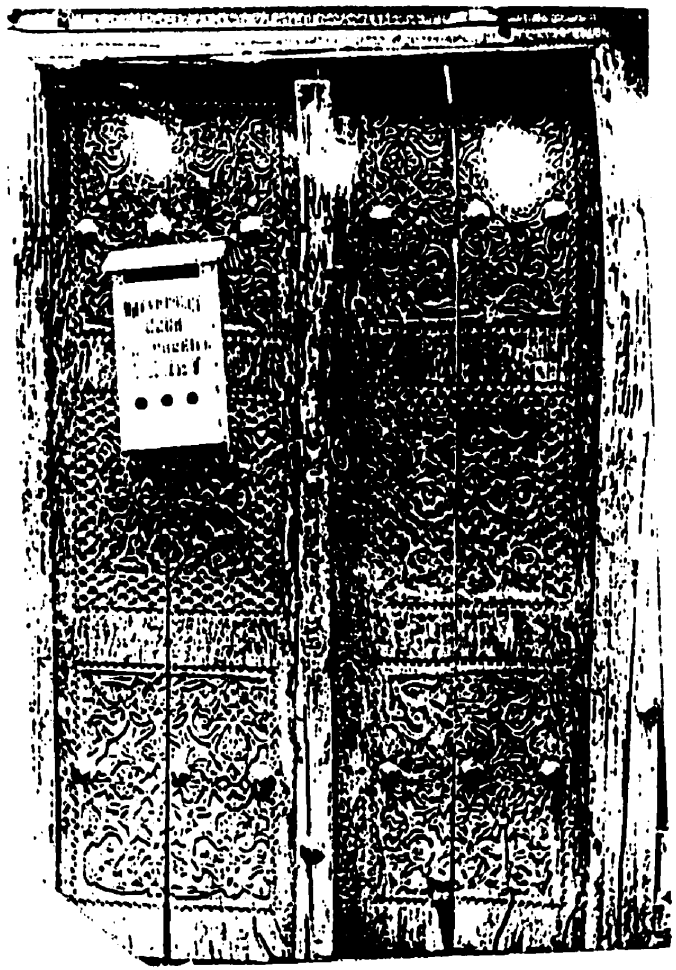


Figure 15. Entrance Gate to Uzbek Courtyard House

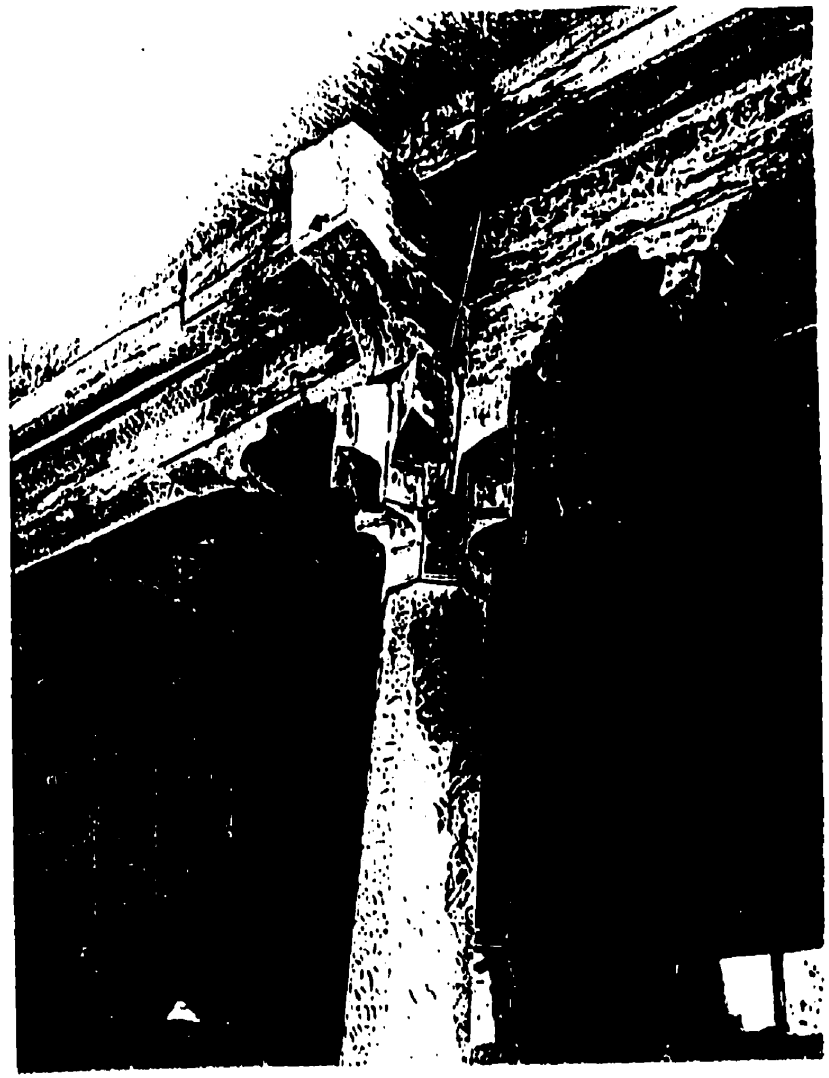


Figure 16. Structural Column Capital

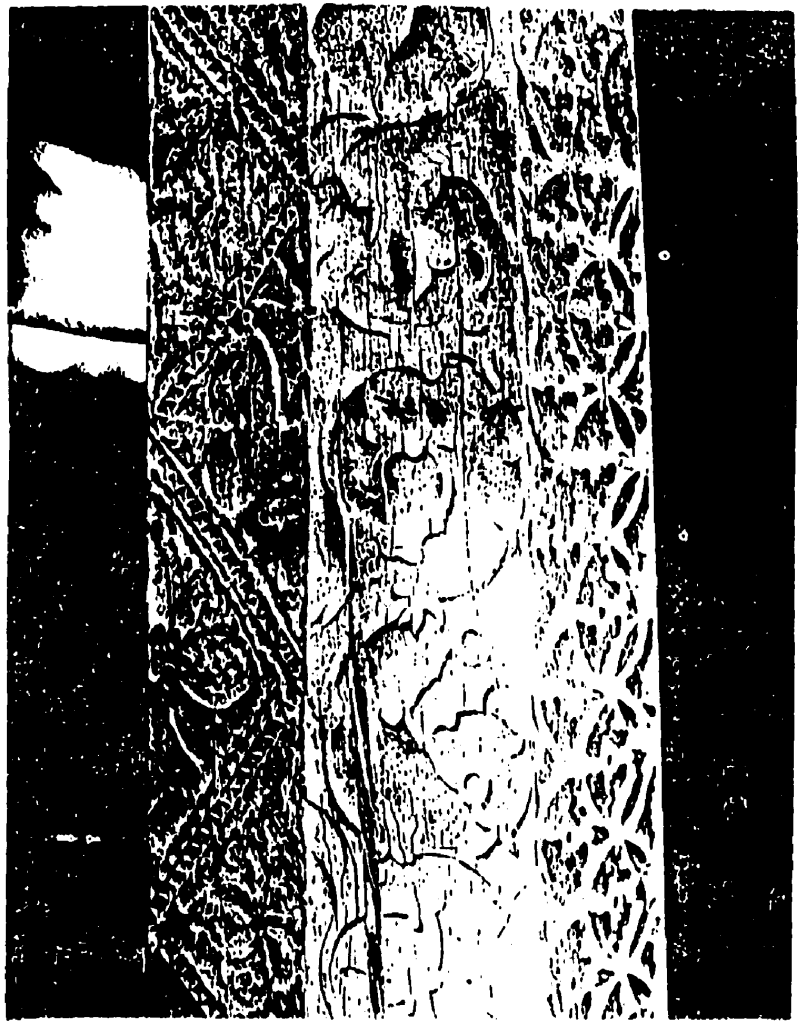


Figure 17. Structural Column Body - showing orante superficial decoration

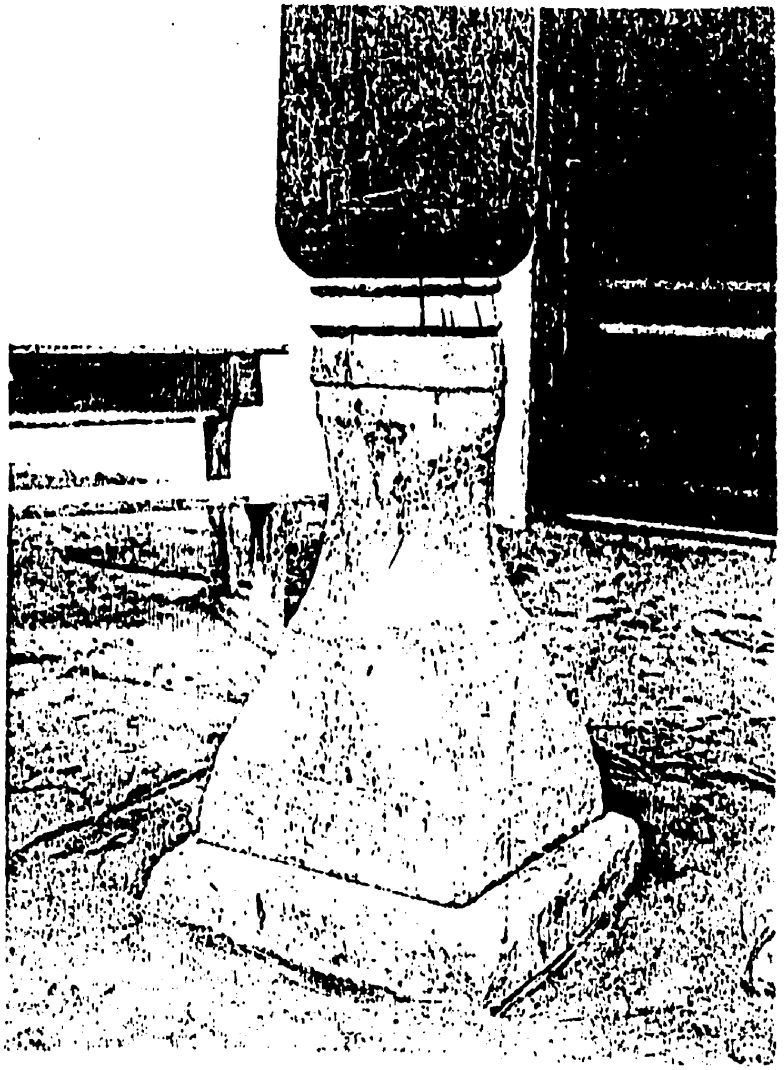


Figure 18. Structural Column Base

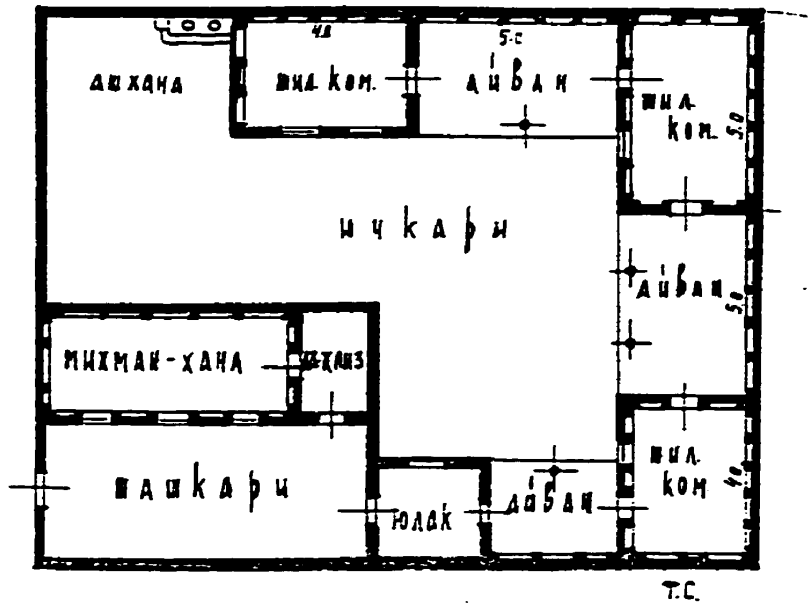


Figure 19. Plan of Residential House - shows ichkari in the centre space

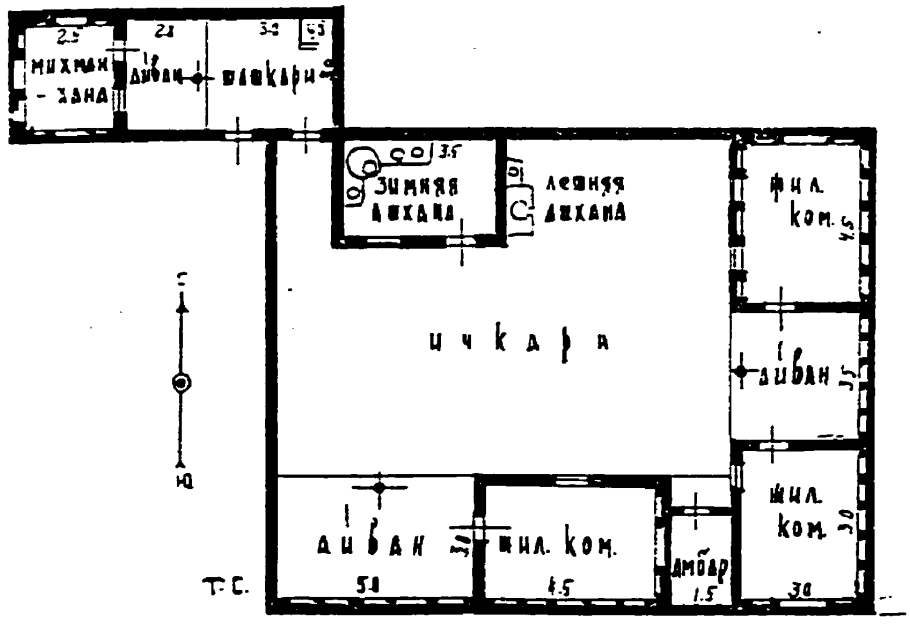


Figure 20. Plan of Residential Courtyard House - shows variation on standard plan

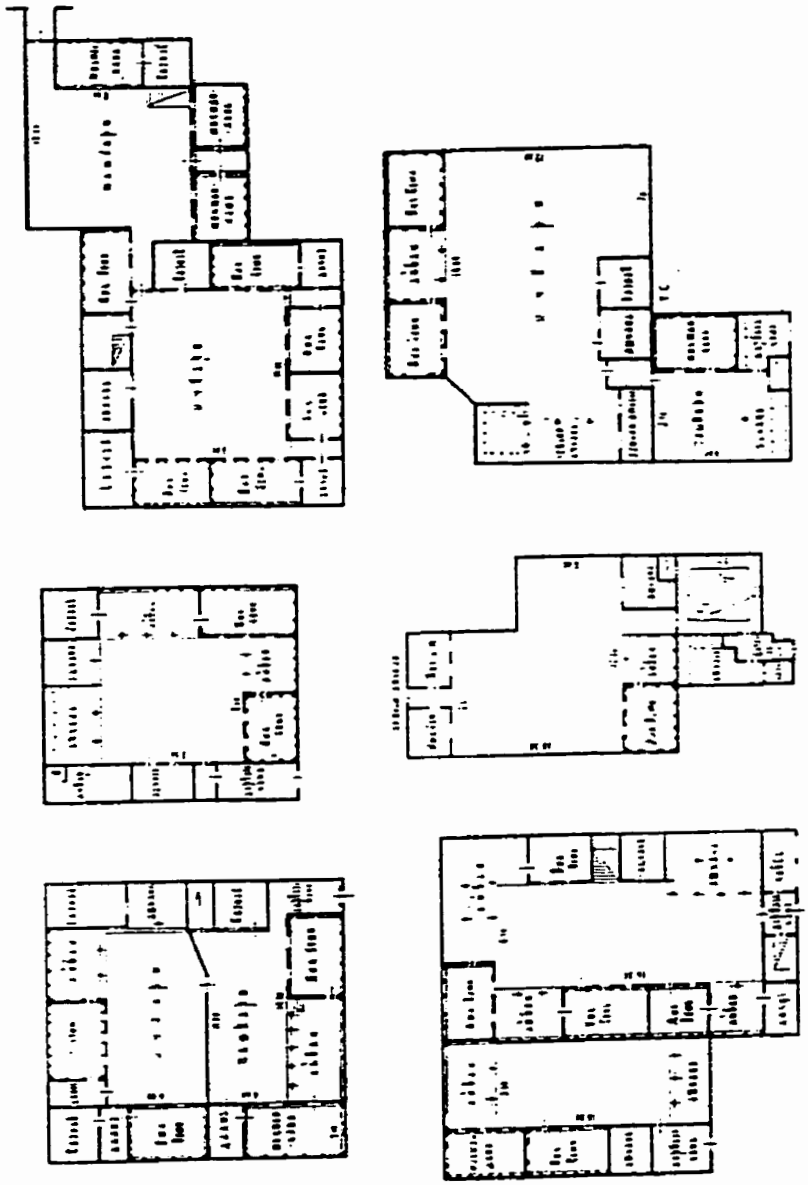


Figure 21. Variations on the plan of the Courtyard House

Plans of homes very rarely demonstrated repetition. The layout of individual homes always expressed a functional understanding and relationship to residential space, rather than following a particular social or cultural typology (Pugachenkova, 1993). As a result a visitor could go from one home to another and find two completely different layout plans for the residences (see figures 19, 20, 21). That is a social code rarely exerted a strong influence over the manipulation of residential space (Pugachenkova, 1993). Overwhelmingly the influences came from functional requirements.

Perhaps the best example of this functional planning method is the residential response to environmental conditions. In Tashkent this is by and large the measures taken to prevent the summer heat from penetrating personal space and areas of recreation within the home. The residential courtyard demonstrates this understanding and response to environmental conditions.

As a response to extreme heat (above 50 degrees Celsius) much of the courtyard activity was located in the southern and eastern quarters of the space. Paramount among these activities was the social connection centred around the aiwan, a covered, elevated meeting space for dining, tea, and sleeping (see figures 13, 14). In the summer months, family activity was conducted primaryily in the courtyard. Personal manufacturing of handicrafts, urban agriculture and so on all took place in the courtyard. The aiwan served as mealtime, teatime and communal bed for the entire family. The importance of keeping this area free from direct sunlight and ambient heat was paramount.

3.2.14 Building materials

While the use of baked clay bricks and wood timbers was traditional in most residential homes (see figures 16, 17, 18) it can be argued that these materials restricted the manipulation of space (Ziyayev, 1987). It was not until tne introduction of colonial style building materials that this restriction was lifted and the residential home began much more dramatic changes in its typology (Ziyayev, 1987).

With two simple materials like metal and glass the form of the Tashkent courtyard house changed in scale, volume and social meaning (Ziyayev, 1987). Sheets of metal and metal girders allowed the expansion of the closed spaces of the home to be expanded with much greater ease. As a result many homes expanded the roof of the house over the courtyard, thereby creating a greater enclosed living space. Additionally, the constructive versatility of these materials allowed such enclosures to be temporal if the

resident so desired, thereby allowing the occupants to change the form of the house according to the seasons.

Glass also played a role in giving the residential home new meaning. As the cost of glass (windows) was very high, working with such materials was generally only affordable by those with more substantive financial resources. As a result, the homes of wealthier people had the opportunity to allow greater amounts of light into their homes, while the homes of other people remained dark. As such the residents of homes with poor lighting remained in the traditional mode of seasonal outdoor life, while residents of homes with better lighting were now able to conduct work (that was traditionally conducted in the courtyard) inside (Ziyayev, 1987).

3.3 Soviet Cultural Hegemony in Tashkent

This section of the thesis includes a large portion of the literature review regarding the period of Tashkent's history that is of critical importance to the development of its urban cultural identity. This section discusses a range of material covering the ideological tenets that guided the Soviet movement in Tashkent and the resultant urban artefacts that came to act as media through which Soviet ideology changed Tashkent culture.

3.3.1 Russian Revolution of 1917

The Russian Revolution was a series of events in imperial Russia that culminated in 1917 with the establishment of the Soviet state that became known as the Union of the Soviet Socialist Republics (USSR) or more colloquially as the Soviet Union. Two successful revolutions that occurred in 1917 are referred to collectively as the Russian Revolution.

The first revolution overthrew the autocratic imperial monarchy. It began with a revolt on February 23 to 27, 1917, according to the Julian, or Old Style, calendar then in use in Russia. (On January 31, 1918, the Soviet government adopted the Gregorian, or New Style, calendar, which moved dates by thirteen days; therefore, in the New Style calendar the dates for the first revolution would be March 8 to 12.

Events described in this section, which occurred before January 31, 1918, are given according to the Julian calendar.)

The second revolution began with an armed insurrection on October 24 and 25. It was organised by the Bolshevik Party against the Provisional Government and effected a change in all economic, political, and social relationships in Russian society as well as in years to come in the satellite republics of the Soviet Union (Pugachenkova, 1993).

The underlying causes of the Russian Revolution are rooted deep in Russia's history (Pugachenkova, 1993). For centuries, autocratic and repressive tsarist regimes ruled the country and most of the population lived under severe economic and social conditions. During the 19th century and early 20th century students, workers, peasants, and members of the nobility staged various initiatives, aimed at overthrowing the oppressive government. Russia's badly organised and unsuccessful involvement in World War I (1914-1918) added to popular discontent with the government's corruption and inefficiency (Kopp, 1970). In 1917 these events resulted in the fall of the tsarist government and the establishment of the Bolshevik Party, a radical offshoot of the Russian Social Democratic Labour Party, as the ruling power.

3.3.2 Soviet Period

The Russian Empire collapsed during the Russian Revolution of 1917, and the Bolsheviks (militant socialists) seized power in Russia. During the Russian Civil War (1918-1921), the Bolsheviks sought to reclaim the territories of the former Russian Empire. They established a new set of political entities in Central Asia that were ruled by local Bolshevik soviets, or councils. In 1918 the Bolsheviks made much of the southern part of Central Asia, including part of present-day Uzbekistan, into the Turkistan Autonomous Soviet Socialist Republic (ASSR) within the Russian Soviet Federated Socialist Republic (RSFSR). Other areas of present-day Uzbekistan were still under the administration of Khiva and Bukhara. The traditional leaders of these political entities were overthrown in 1920, and later became what is referred to as the Khorezm People's Soviet Republic and the Bukhara People's Soviet Republic, which still maintained nominal independence. In 1924 the borders of political units in Central Asia were changed and the Uzbek Soviet Socialist Republic (SSR) was formed from territories of the Turkistan ASSR, the

Bukhara People's Soviet Republic, and the Khorezm People's Soviet Republic. In the same year the Uzbek SSR became one of the republics of the Soviet Union, which had been officially established in 1922.

In 1930 the Uzbek capital was changed from Samarkand to Tashkent. In 1936 the Uzbek SSR was enlarged with the addition of the Karakalpak ASSR (present-day Qoraqalpogh Autonomous Republic), taken from the Kazakh SSR. Territory was transferred several times between the Kazakh SSR and the Uzbek SSR after World War II (1939-1945). The present-day borders of the Central Asian states are a result of the territorial units that the Soviets circumscribed during this period (Kopp, 1970).

The Soviets imposed many dramatic changes on the Uzbek SSR (Pugachenkova, 1993). In 1928 land was forcibly collectivised into state farms. Another land-related development (one with a catastrophic impact) was the drive (initiated in the early 1960s) to substantially increase cotton yields in the republic. The drive led to overzealous irrigation of the Amu Darya and subsequently the ecological disaster in the Aral Sea basin began (Pugachenkova, 1993).

During World War II many industries were relocated to the Uzbek SSR from less safe locations in western regions of the USSR. They were accompanied by large numbers of Russians and members of other nationalities who were evacuated from areas near the front. Since so many Uzbek men were fighting in World War II, women and children began to take a more prominent role in the economy (Ziyayev, 1987). Some local women began to work in urban industries. Despite this, the Uzbek population remained overwhelmingly rural (Ziyayev, 1987). Additionally, during the war the Soviet authorities relocated entire ethnic groups from other parts of the Soviet Union to the Uzbek SSR and elsewhere in Central Asia.

Uzbek society was altered in major ways during the Soviet period (Pugachenkova, 1993). Islam, the traditional religion of the region, became a focal point in the 1920s for the anti-religious drives of Communist fanatics (Pugachenkova, 1993). Most mosques were closed, and religious schools became anti-religious museums. Uzbeks that were deemed 'nationalist' (often practising Muslims) were targeted for imprisonment and in many cases execution.

Another development was the virtual elimination of illiteracy, even in rural areas (Pugachenkova, 1993). Only a small percentage of the population was literate before 1917. This percentage increased to nearly 100 percent under the Soviets.

The Communist Party of the Soviet Union (CPSU) was the only legal party in Uzbekistan until 1990. The first secretary, or head, of the Communist Party of Uzbekistan (the republic's branch of the CPSU) was consistently an Uzbek. Nevertheless, over much of Soviet history, Uzbeks were underrepresented in the higher levels of the republic Communist Party organs. Uzbeks were even more underrepresented in the central organs of the levels of the party in Moscow (Pugachenkova, 1993).

3.3.3 Communism

Communism is a socio-political framework in which the major resources and means of production are owned by the community rather than by individuals. In theory, such societies provide for equal sharing of all work, according to ability, and all benefits, according to need (Dehkonhojayev, 1986). Some communist societies assume that a coercive government would be unnecessary and therefore that such a society would be without rulers (Dehkonhojayev, 1986). Until the final stages of communism are reached however, communism involves the abolition of private property by a revolutionary movement.

As a concept of an ideal society, communism is derived from ancient sources, including Plato's Republic and the earliest Christian communes. In the early 19th century, the idea of a communist society was a response of the poor and the dislocated to the beginnings of modern capitalism (Dehkonhojayev, 1986). At that time communism was the basis for a number of utopian settlements. Later the term *communism* was reserved for the philosophy advanced by Karl Marx and Friedrich Engels in their Communist Manifesto, and the movement they helped to create in Central Europe. Since 1917 the term has come to mean those who regard the Russian Revolution as a model that all Marxists should follow (Dehkonhojayev, 1986).

3.3.4 Marx and Engels

In their writings, Marx and Engels tried to analyse 'contemporary society', which they described as capitalistic. They pointed out the inconsistencies between ideals and reality in modern society: rights granted to all had not done away with injustices; constitutional self-government had not abolished

mismanagement and corruption; science had provided mastery over nature but not over the fluctuations of the business cycle; and the efficiency of modern production methods had produced slums in the midst of abundance (Smith, 1994).

Marx and Engels described all human history as the attempt of men and women to develop and apply their potential for creativity for the purpose of controlling the forces of nature so as to improve the human condition (Smith, 1994). In an ongoing effort to develop its productive forces, humanity has been remarkably successful, in terms of progress (Smith, 1994). However in developing 'productivity', various social institutions have been created that have introduced exploitation, domination, and other evils. Engels is quoted as saying 'the price humanity pays for progress is an unjust society' (Smith: 23, 1994).

Marx argued that every social system of the past had been a device by which the rich and powerful minority could live by the toil and misery of the powerless majority, and that each method of exploitation had flaws that sooner or later destroyed it, either by slow disintegration or by revolution (Smith, 1994). Engels and Marx believed that the capitalist system was flawed and therefore destined to destroy itself (Smith, 1994). Attempts were made to show that the more productive the capitalist system became, the more difficult it would be to make it function. That is to say, the more goods a system accumulated, the less use it would have for these goods or else the more people it trained, the less it could make use of their talents. As a result, capitalism would eventually choke on its own wealth (Smith, 1994).

It was thought that the collapse of the capitalist economy would result in a political revolution in which the masses of the poor would rebel against their oppressors (Smith, 1994). This revolution would do away with private ownership as the primary means of production. The new economy would produce not what was profitable, but what the people needed. Moreover, inequalities and coercive government actions would disappear (Smith, 1994).

Shortages, inequalities, and coercive government have persisted in countries that called themselves Communist (Dehkonhojayev, 1986). The first of these countries was Russia, a huge, poor, relatively backward nation that was just beginning to acquire an industrial base (Dehkonhojayev, 1986). With a populace that was still largely illiterate, Russia and her colonies had no experience in political participation. In 1917, after a series of half-hearted reform measures and disastrous mismanagement during World War I, the antiquated mechanism of tsarist rule simply disintegrated and was swept away

(Dehkonhojayev: 67, 1986). After a long period of political upheaval, the tsarist system of capitalistic government was followed by the Bolshevik faction of Russian Marxism. This later became known as the Communist Party.

3.3.5 Soviet Political and Economic Development

From its inception, Communist rule in the Soviet Union faced a variety of problems. In the early years the government's role was challenged repeatedly by its enemies within the country. When the Communist Party emerged victorious, it was faced with the need to rebuild the nation's ruined economy and to train and modernise Soviet people for life in the 20th century (Ziyayev, 1987).

After the disastrous interruption of World War II Soviet leadership was ruthless in organising all available human and material resources for the job of modernisation (Ziyayev, 1987). According to Ziyayev (1987) discipline and economic harshness were felt to be necessary to achieve their goals. Furthermore it was felt that this could only be achieved by a dictatorship that could control all social activity and simultaneously quell any hint of dissent or autonomy (Ziyayev, 1987). The resulting system of total control was labelled totalitarianism.

3.3.6 Totalitarianism

In political science, totalitarianism is defined as a system of government and ideology in which all social, political, economic, intellectual, cultural, and spiritual activities are subordinated to the purposes of the rulers of a state (Pugachenkova, 1993). A number of important features distinguish totalitarianism, a form of autocracy peculiar to the 20th century, from such older forms as despotism, absolutism, and tyranny. In the older forms of autocracy people could live and work in comparative independence, provided they refrained from politics. In modern totalitarianism however, people are made completely dependent on the wishes and whims of a political party and its leaders (Pugachenkova, 1993). The older autocracies were ruled by a monarch or other titled aristocrat who governed by a principle such as divine right. The modern totalitarian state, on the other hand, is ruled by a leader or dictator who controls a political party.

3.3.7 Totalitarian Governments

Countries whose governments have been typically characterised as totalitarian include: Germany, under the National Socialism of Adolf Hitler; the Soviet Union, particularly under Joseph Stalin; and the People's Republic of China, under the Communist rule of Mao Zedong (Mao Tse-tung).

Under a dictator, members of the ruling party become the elite of the nation. The entire society is subjected to a hierarchical organisation where each individual is responsible to another in a position of higher authority. The single exception to this is the supreme leader, who is answerable to no one. In a totalitarian regime such as the Soviet Union all non-governmental social groupings are either destroyed totally or co-ordinated to serve the purposes of the party and the state (Pugachenkova, 1993).

3.3.8 Control of Mass Communication

Total subjection of the individual becomes possible only through advanced science and industrial technology (Dehkonhojayev, 1986). Among the most decisive, a technologically conditioned feature of totalitarian dictatorships is the monopoly of mass communication (Dehkonhojayev, 1986).

With a monopoly of mass communication, the ruling party and the government are in possession of all channels through which people receive information, guidance, and direction. All newspaper, magazine, and book publishing, as well as radio and television broadcasting, theatre productions, and motion pictures is centrally controlled and directed. Architecture, regarded as a visual art and means of cultural expression also falls into this category. Writers, poets and architects alike are enrolled in party-controlled organisations, and are licensed by the government. Usually they are required to be members of the party. The 'party line', that is to say the party's interpretation of policy, is imposed on all mass media through censorship.

3.3.9 Control of the Economy

A centrally-controlled economy enables the totalitarian dictatorship to exploit its population for foreign conquest and world revolution (Dehkonhojayev, 1986). For example, all resources can be concentrated on a single important military project. The totalitarian type of economy enables the dictator to control the workers and make them dependent on the government.

3.3.10 The Communist Manifesto

The Communist Manifesto was a declaration of the principles and objectives of the Communist League (a secret organisation of émigré German artisans and intellectuals) that was published in London in 1848. Written by Karl Marx and Friedrich Engels, the Manifesto is divided into four sections.

In the first section, Marx illustrates his theory regarding the history of exploitation. He characterises the modern world as the stage for a dramatic confrontation between the ruling bourgeoisie (the capitalists) and the downtrodden proletariat (the working class) (Pugachenkova, 1993). Guided by the logic of capitalism to seek greater profits, the bourgeoisie constantly modifies the means of economic production, which Marx regards as the fulcrum of history. As a result, it unknowingly sets in motion social forces that it can no longer control. Consequently it calls into existence the class destined to end its rule—the proletariat (Pugachenkova, 1993). As the proletariat increases in number and political awareness is raised, class aggression will generate a revolution and the inevitable defeat of the bourgeoisie.

In the second section, Marx identifies Communists as the allies and theoretical vanguard of the proletariat. He emphasises the need to abolish private property and to make fundamental changes in material existence, which he regarded as the ideological expression of capitalism. After a revolution, economic production will be in the hands of the state (the proletariat), which will be organised as the new ruling class. As ownership will be 'in common', class distinctions will begin to disappear (Pugachenkova, 1993).

The third section of the Manifesto is essentially a criticism of various alternative socialist visions of the time, is now largely of historical interest. The final section compares Communist tactics to those of other opposition parties in Europe.

3.3.11 The Soviet Union – Planning and Architecture

All over Europe World War I brought construction to a halt. But in the West this interruption did not come until the 'new' architecture associated with advancements in industrial development, had taken root. The industrially advanced nations of the West had had the opportunity to explore and discover the new technologies associated with industrially revolution. Moreover this period of exploration allowed the architects and city planners of the period to test and implement (albeit crudely) some of this new technology (Ziyayev, 1987). Office buildings, factories and the like had become realities in the West. After World War I the architects of these countries were not forced to begin again from scratch. In the Soviet Union the scenario was very different.

The October Revolution destroyed 'established traditions' of every kind (Ziyayev, 1987). This was a period of death for pre-Revolutionary ideas (Ziyayev: 211, 1987). Whether they were ideas of art, architecture or moral concepts, they all met an equal fate. The horrendous conditions in which the pre-Revolutionary peasant lived had created a temperament that demanded drastic and rapid changes to the mode of life for the average person (Ziyayev, 1987). In this heated pace for social change the social scene was being rapidly cleaned of the former order and the social and cultural values that accompanied it (Ziyayev, 1987). But at this pace, the new order was unable to keep up with the demands for replacements to the vacancies that had been left by the discarded traditions of the Tsarist society. As a result, the newly formed Soviet Union, ruined economically by the war, was put in a position of being the least developed state, economically and industrially in Europe (Ziyayev, 1987).

The establishment of the necessary conditions for the 'new' architecture and a philosophy of city planning depended on the needs of the moment and on a vague notion of what could be a new way of life (Pugachenkova, 1993). For many this meant access to comforts that they had been denied in the past and for others it meant a more humane existence. City planners and architects of this era believed that one of the key problems associated with the institution of rational planning and development is the private ownership of land (Pugachenkova, 1993). As a result city planning and architecture stood in a symbiotic relationship with the tenets of the new communist regime. The abolition of private ownership, aid private life for that matter, was one of the primary components of the Soviet ideology. Architects and planners saw this as an opportunity to realise the designs and plans with little impediment. Consequently, architects and

planners for the most part went along with the new ideology. Whether they firmly believed in the new ideology or not, the viewed the approach as beneficial for them professionally (Pugachenkova, 1993).

For the most part this was a period of modernisation on the grandest scale. The socialist city was not only charged with the task of modernisation (anticipating the same level of modernisation as was apparent in the West), it believed that the modernised socialist city should fundamentally differ from its capitalist counterpart (Khan-Magomedov, 1983). The idea was to have a common wealth among all citizens of the State. While the Western city differed in 'form' as a result of differences and imbalances in economic and cultural influence (content), the socialist city was to reflect the collective and group-oriented nature of socialist settlement and cultural/social values (Khan-Magomedov, 1983).

The 'modernisation' of the Soviet State meant the modernisation of the individual citizen. By and large the populations of the fifteen satellite republics that formed the Soviet Union were dominantly rural populations. With modernisation, and the associated influx of people from their respective rural environments to the unprepared urban centres, the life of the individual changed dramatically (Khan-Magomedov, 1983). Even for those that had a tradition of urban life, the rapid changes in social democracy and 'spreading of wealth' among those that once had very little material possession, meant serious cultural change (Khan-Magomedov, 1983).

Changes occurred in many facets of urban life. Living space, working space and recreational space, three of the primary components comprising all urban environments, all received particular attention. The need to develop an architecture and planning that would express as form, the content of the socialist, communist ideology gave rise to two movements that would come to dominate much of Soviet architecture (Khan-Magomedov, 1983). Rationalist and Constructivist architecture contributed to the manipulation of urban space and consequently human activity, perhaps more significantly that any other movement in Soviet architecture (Khan-Magomedov, 1983).

3.3.12 Soviet Rationalism

Immediately following the Revolution intense experimentation began in the creation of a formal basis for a Soviet architecture. Architects operating in the newly forming Soviet Union were aware that

specific problems regarding function and structure, and a new aesthetic imagery required the mastery of a new formal expression (Khan-Magomedov, 1983).

Rationalism rejected the notions of eclecticism and stylisation and in doing so this led to the abandonment of traditional architectural forms. A replacement for these forms was a form of expression that was still in the making. Rationalism as expressed in architecture and construction of the built environment was still young and at this point was not set up to adequately replace the time honoured 'traditional' forms of architectural expression. As a result, projects in this early period of Soviet architecture were considered to be primitive and unprofessional, lacking compositional resources (Khan-Magomedov, 1983). If one considers all the aspects of the design process collectively, function, structure and so forth, for the Rationalists, architectural form was considered to be the weakest link in the chain (Khan-Magomedov, 1983).

In these early stages of the Soviet Union, in architecture and urban design there were two specific difficulties that helped to distinguish the Rationalists from other schools of thought (classicists, constructivists and so forth). Firstly there was the relationship of form to the objective rules governing individual perception. Secondly there was the relationship to the new functional and constructional basis of a building. At this time this bilateral approach to what was considered to be one problem distinguished the two camps that were prevalent at the time, the Rationalists and the Constructivists (Khan-Magomedov, 1983).

The Rationalists favoured the first approach. Rationalism was an approach to architecture that privileged the value of space over function, and more importantly how the individual perceived that space, psychologically and physiologically. The Constructivists on the other hand approached architecture privileging the function and structure of building design.

The issue of modern technology at the time was something that provided a clear division between the Rationalists and the Constructivists. The Rationalists were concerned with the advancement of technology in architectural projects but in terms of what it could contribute to spatial organisation and aesthetics. Ladovsky, a leader in the Rationalist movement in the early years of the Soviet Union, stated that, though form may be abstract and independent of all materials, its impact on the spectator was to some extent a function of the material employed (Kopp, 1970).

Rationalism did not see the role of function as paramount in producing the imagery of a particular artefact. The 'look' of the building did not have to be solely determined by its function (Kopp, 1970). Or stated another way, design involved more than the external reflection of interior purpose. Ladovsky felt that the 'new' architecture of the Soviet Union had to involve the *creation* of an image (Kopp, 1970). Moreover, this creation would now be done in a 'new', non-traditional way. As mentioned before the decorative arts of the traditionalists were viewed negatively by the Rationalists. As such the creation of a new image meant the manipulation of space rather than the decoration of it. Solid forms void of superimposed decoration were to become the building blocks of this new architecture.

The problem was that this movement (Rationalism) was still in its youth, and as such, the methods for generating and manipulating such forms were either absent of not evolved enough to contribute significantly to the new architecture and urban design. Additionally, as the Rationalists were preoccupied with psychological and physiological perception of space, these new images generated by spatial manipulation had to be more than simply a composition of geometric figures. Rather they were to stimulate the imagination through the conjunction of clearly intangible forms.

The task for the rationalist architect was to discover not merely the emotional, but also the rational principles for the application of aesthetic aspects to architecture. Moreover the training of an architect was now viewed as enabling a designer to apply objective perceptual criteria to his creations within the built environment. To achieve this Ladovsky proposed research into these new architectural methods, and to have a higher degree of direct involvement of the individual (the one who interacts with the environment) (Khan-Magomedov, 1983). Additionally, Ladovsky argued for the primacy of the architect's creative imagination, viewing this not only as a means of manipulating space, but as playing a large role in the generation of innovative ideas (Khan-Magomedov, 1983).

3.3.13 Soviet Constructivism

Constructivism was the second main trend in Soviet architecture in the period following the Revolution. It reflected the requirements of the new architecture as real building work began in the early

1920s. In these early stages, Constructivism was greatly influenced by Constructivism in its wider sense, in art, book exhibitions, Soviet posters and placards, and in the decorative arts.

Soviet architectural Constructivism emerged from the struggle to establish new forms of art and bring them into line to reflect the changes taking place in society, the new production processes, and the development of fresh aesthetic ideals. It has been stated that Soviet Constructivism was a synthesis of Leftist experiments in painting and theories promoted in Production Art by Brik, Gan and Kushner. It should however be stated, that even though Production Art and Constructivism share many qualities, and that Constructivism borrows many principles from Production Art, they are by no means identical (Khan-Magomedov, 1983).

Production Art ideas had been formulated after the establishment of Soviet power as part of an attempt by Leftist painters to show the devolution of the role of art in contemporary (Soviet) society. In reference to the state of art and design that preceded Production Art, Mayakovsky, a leader of both Production Art and Constructivism, stated that the revolution of content is unthinkable without the revolution of form (Khan-Magomedov, 1983). Great efforts were therefore made to reject art and artefact of a society that no longer existed. More importantly, the rejection of pre-Revolutionary art and artefact meant the rejection of the ruling classes that that art was meant to represent and serve. This being one of the primary tenets of the Revolutionary (Soviet) movement, it quickly found stability in Soviet art and architecture (Kopp, 1970).

As the foundational principles of the new Soviet society were a classless social structure and accessibility of the working class to 'culture', art of the period preceding Soviet power was cast out as being beauty that seduced the viewer (Kopp, 1970). Constructivism and Production Art fell into the ideological tenets of the new Soviet regime in that they promoted an everyday, accessible and more importantly, a 'useful' art, of and for the working class. In an article in *Art of the Commune*, a publication typical of the early stages of Soviet rule, it was suggested that art's purpose was to depict life, not to decorate it (Kopp, 1970). To this it was added that the role of the artist was to create an objective reality from things composing the environment, rather than to depict it (Kopp, 1970).

This approach to the visual arts seemed to suit architects and their urban design tasks well (Kopp, 1970). Architects, by their very nature adhered to an approach recognising the importance and role of

function. But Constructivism and Production Art went even further. The ideology was not only to change the role of art and how it interacted with and represented a social body. It went further to say that the production of art was to be related to as labour, just as labour was conducted in a factory or mill (Khan-Magomedov, 1983).

This gave rise to a movement called 'Veshchizm'. Veshchizm was translated as being 'the culture of things' (Khan-Magomedov, 1983). Constructivism and Veshchizm were closely associated with one another in the early years of the Soviet Union (1920's to the start of World War II). They were best represented in the Constructivist Working Group (Khan-Magomedov, 1983). The aim of this group of artists and architects was the promotion of the communist expression of material values. The basic means of expression provided by the materials available were said to be tectonic methods, construction and function that would bring the material elements of industrial culture into play. Tectonic methods were defined by the Group as methods dependent upon the purposeful use of industrial materials, while construction meant a chosen function taken to its limit (Kopp, 1970). According to the Group, the 'new' art should, by means of production, foster the creation of a new material environment (Kopp, 1970).

Though having significant influence on art and architecture, the Group's ideology was viewed as Utopian, and as a result, much of the ideology was modified to fit particular situations, especially in terms of architectural projects (Khan-Magomedov, 1983). The values of the communist system, Production Art and Constructivism were often characterised in the Group's writings and publications. Perhaps one of the better examples of this is found in the statement forwarded by the Group regarding the proletariat, '...the proletariat will come to reject all useless things, and love only that which it requires' (Khan-Magomedov, 1983).

Ultimately for architecture and architects, Constructivism provided a new direction in the production of urban artefacts. The most vivid example of this is in the rejection of traditionalism and the classicists. The classicist argument stressed the necessity for a continuity of tradition. Additionally it states that the transplantation of forms from the past into contemporary culture directly is inappropriate (Khan-Magomedov, 1983). It requires a creative interpretation of contemporary culture, and the understanding of one state of heritage. Constructivism and its artistic nihilism accepted the classicist notion of requiring a

new interpretation of contemporary culture, but rejected the role of creativity in that interpretation, and rejected the inherited form (Kopp, 1970). Rather emphasis was placed on structure and functionality.

3.3.14 A Brave New World

Moses Ginzburg viewed the new architecture as playing a very specific role in society. He referred to architecture as the 'creation of structures needed to transform the nation's way of life' (Khan-Magomedov, 1983). Moreover he regarded architects as those whose intention it was to erect 'new social condensers' that were capable of producing a mutation in man [sic] (Khan-Magomedov, 1983).

In the initial stages following the Revolution, before the socialist ideas began to take shape, people such as Marx and Engels were exchanging the ideologies supporting a social utopia. But in order to realise these ideas and notions of new cities, new social gathering places and the like, these places had to be visualised and portrayed (by architects of the time). The overriding influences of this new way of life for the burgeoning Soviet society were the new economic and political relations and the collective appropriation of the means of production and exchange. It was understood that the structure of the social environment was based on these components, and if they changed (in other words, if the content changed), so too would the physical environment have to change (form) (Khan-Magomedov, 1983).

Architects in the Soviet Union at the beginning of the 1930s were faced with a problem. As the ideological foundation of modern architecture began to receive immense criticism from the State, Constructivist architects were regarded as the scapegoats. They were blamed for producing these notions of a need for a new way of life, and the transformation to it, as a basis for creating for themselves a new movement in architecture. Of course this could not be farther from the truth. The ideas of change and producing a new way of life were not only in the programmes of architects, but in those of political leaders, party members and the general members of society (Kopp, 1970).

As rejection of the old way of life (part of the Constructivist tenets) was synonymous with the acceptance with the new way of life, the situation of the Soviet Union was rather precarious in that a clear vision of this new way of life was not yet apparent.

3.3.15 Socialist Realism

Socialist Realism is a form of realist art originating in the Soviet Union in the 1930s and spreading to other Communist countries after World War II (1939-1945). It intended to glorify the workers, the Communist Party, and the national leader. Socialist realism transformed art into a form of government propaganda.

Socialist realism was forged in the Soviet Union under Soviet leader Joseph Stalin. The first move towards its establishment as the country's official artistic doctrine came in 1932 when the Central Committee of the Soviet Communist Party decreed that all independent artistic groups be disbanded in favour of new 'party-controlled' unions (Dehkonhojayev, 1986). In 1934 Communist Party official Andrei Zhdanov gave a speech at the All-Union Congress of Soviet Writers in which he asserted socialist realism to be the only form of art approved by the Communist Party (Dehkonhojayev, 1986). Henceforth, artists would be required to provide a "historically concrete depiction of reality in its revolutionary development ... combined with the task of educating workers in the spirit of Communism", (Dehkonhojayev, 1986). Zhdanov also used a phrase of Stalin's, describing the artist as an "engineer of the human soul", (Dehkonhojayev, 1986).

As there was little supporting aesthetic theory to be found in the writings of the founding fathers of Soviet Communism, (Marx, Engels, and Lenin) the substance of socialist realism developed gradually from the initial, rather vague statements and subsequent criticisms and comments by the party (Dehkonhojayev, 1986). Broadly, it came to mean that the artist should depict 'actual' events and people in an idealised, optimistic way. This was meant to provide a glimpse of the glorious future for the Soviet Union under Communism. Art was to serve society and be accessible to the masses. Artists who did not conform to the rules of socialist realism might be either ousted from employment, exiled, or killed. In stark contrast to the atmosphere of the 1920s, in which avant-garde art was encouraged as part of the revolutionary spirit, all so-called formalist, progressive art, especially abstract art, was decried as capitalist and bourgeois, and thus devoid of any relevance to Communist workers.

Although party decrees drastically narrowed artistic freedom, artists nevertheless offered a variety of interpretations of socialist realism through style and subject matter. Popular subjects included scenes of workers labouring in fields or factories, portraits glorifying Stalin and other party figures, historical scenes

of the Russian Revolution, and idealised depictions of domestic life. Stylistically, artists were encouraged to imitate the work of Russian painter Ilya Repin. However some produced timid imitations of Impressionism or employed a deliberately naive manner.

Following the end of World War II, socialist realism became more strongly nationalist, and foreign influences were especially criticised. This led to a 'highly polished official style' and an emphasis on scenes of past glory (Dehkonhojayev, 1986). However, with the death of Stalin in 1953 and the decline of Stalin's reputation under his successor, Nikita Khrushchev, socialist realism was less forcefully upheld. It did however, remain the official aesthetic. It was eagerly taken up in Communist China, where it remained the only acceptable style until the death of Chinese Communist leader Mao Zedong in 1976. With the collapse of Communist power in the Soviet Union and Eastern Europe in the late 1980s, socialist realism fell out of favour and began to be used ironically by some artists as a means of attacking the old Communist system.

3.3.16 Soviet Urban Planning and Design in Tashkent

Significant social and economic advances in Tashkent began in the first years following the Revolution. In 1924 a project was undertaken to develop plans for the reconstruction of the city. This was to be the first systemic approach to planning for the city, in its urban history (Pugachenkova, 1993).

For the most part attention was to be paid to the redevelopment of the city centre, and as a result many of the changes that were to come to fruition were to be in the city's centre. Moreover this project would endeavour to engage in the detailed planning of the city centre's streets, pedestrian walkways and political zones. This was the first time that this kind of attention was paid to the details of city planning in Tashkent.

3.3.17 Political Space

In the period following the introduction of the 1924 planning redevelopment project, zoning was implemented as apart of the ordering of urban space of Tashkent. Areas of the city centre were zoned according to administrative, commercial, leisure and other uses. The process of territorialising the urban fabric, in addition to being new to the ordering of Tashkent, meant a completely new way of understanding the city for the average citizen (Pugachenkova, 1993). Where before the Uzbek urban dweller meandered his way through the streets, using certain visual signals to locate certain places or services, the 'modern' Uzbek now located these artefacts according to politically distinguished zones, drawn with imaginary lines (Pugachenkova, 1993).

The implementation of zoning (1929) marked a new era of city planning and building in Tashkent. At this time, the city of Tashkent was divided into two parts, separated by the Anhor canal. While this division was by no means exact, it nevertheless separated the 'old city', that is the urban area that demonstrated 'traditional', pre-Soviet built artefacts and spatial organisation, and the new, post Revolutionary portion of Tashkent that was composed primarily of colonial (Russian) architecture and planning.

This new era of planning and construction began with the fostering of new ideas regarding the development of urban space and artefacts, with calls for design proposals being made. The architect Senchenkov proposed one approach to this development. His approach was based on the idea that the 'old city' must be completely reconstructed, and into this reconstruction would be set the new city centre (Pugachenkova, 1993). In doing so, this would enable Soviet administration to resettle in a pre-established community, and base the majority of their political and administrative buildings and services in this existing community. While the plan promoted the reconstruction of the old city's centre in order to facilitate these new buildings, the establishment of political and administrative offices in areas that were already familiar to the indigenous population (i.e. pre-existing urban fabric) would in itself facilitate a smoother transition for the change of government than if the centre was established in a geographically ambiguous zone. In addition to being set in the old city, Senchenkov's proposal was also based in principles of pure geometry and symmetry. With logistical obstacles like these, the project was considered to be a failure even before it left the drafting board.

In the beginning of the 1930s there was increased pressure to create a plan for the redevelopment of Tashkent and most importantly, its city centre. Since the Revolution, the capital of the Soviet Republic of Uzbekistan had been moved to and established in Samarkand, a city some 320 km to the west of Tashkent. At the beginning of the 1930s it was decided to bring the 'capital' back to Tashkent, and with this move certain modifications to the existing urban fabric of Tashkent would have to be made.

While the Senchenkov project failed, another plan would take its place. By 1939 the Soviet 'Genplan', set up by a team of planners and architects from Moscow, was to set the format for the future growth and development of urban space in Tashkent. Genplan (General Plan) was the Soviet version of the 'master plan'. The focus of this plan was the relocation of the city centre and the development of space for political administration. While Senchenkov's plan favoured the development of the city centre in the old city, Genplan, and its designers were focused on creating an urban space with one main centre. Up until this time, both the pre-Revolutionary and the post revolutionary (and pre-Soviet) city centre for Tashkent was located in the new (east of Anhor) half of the city. Genplan, rather than relocating this centre into the old city centre, favoured locating the centre in a neutral area. This neutral area bordered both the old and the new cities along the Anhor canal, and was located in the historical site of the Urda.

Foremost among the questions that were pressing among the designers and planners of the Genplan was the placement of the main squares and locating the sites for major governmental offices and buildings. In a major thrust of construction and planning, before the Soviet Union entered World War II (1942), Tashkent began work on Red Square and Revolution Square, today Mustaqillik Square and Amir Timur Public Park, respectively. Also in this period, efforts were made to modernise portions of the old city that were closest to the new city centre. This modernisation effort meant the widening of streets and pedestrian walkways, and the rebuilding of those major thoroughfares that lead to the centre.

One of the primary goals that drove the organisation of the reconstruction of the city centre was the placement of the major government offices. To reflect the Soviet notion of central government and federalism, these buildings were placed in a geographically small territory, centred around Red Square (Pugachenkova, 1993). Within this space (on the West Side of the Square) the architects located the building known as Government House, today the Navoi National Library. This building was to be both a focal point of the space and in terms of content the most important building on the site. In addition to

Government House, slightly to the north of this building, was the primary visual point of interest, the Monument to Lenin. A stone carved statue that would be remembered as the largest statue of Lenin in the former Soviet Union.

3.3.18 The Square

Also during this period, the reconstruction of the central streets (streets leading to and from Red Square) was undertaken. This reconstruction however was not developed as a process starting from scratch. Rather efforts were made to maintain the existing structure of the layout of the city centre in the transportation plan, and 'reconstruct' only in terms of widening, and designing for greater capacity and visual appeal. Among these streets was Karl Marx Street, and moreover reconstruction began with this street, with the recognition of the importance of the street being paramount, in terms of geographical location and visual access to the centre (Pugachenkova, 1993).

In the late 1930s, Revolution Square was renamed Karl Marx Square in accordance with the major thoroughfare that bisected it. As the fervour of the revolutionary period slowly died away, attention was paid to renaming and reclaiming certain primary urban spaces according to prominent political or social forces or people of the time (Pugachenkova, 1993). As part of this reclamation, and in transforming Revolution Square to Karl Marx Square, a major visual change was made. While the Square was 'Revolution', for the most part it was visually treated in accordance with the Constructivist paradigm. Everything was present for the proper functioning of an informal gathering place. Benches, promenades, street lamps and so forth were all present. When the change took place it was already apparent that the Constructivist paradigm was losing ground to socialist realism. In turning the Square into Karl Marx, the major feature that was added was an eight metre high bust of Karl Marx. While easily commanding visual dominance of the Square, it also played into the reconstruction of the surrounding streets. Five of the pathways, that radiate outward from the bust like spokes in a wheel, lead directly onto five respective streets. The widening and other streetscaping construction that took place along these streets contributed to a visual access to this bust for at least a kilometre.

Around Karl Marx Square were a number of pre-existing stores and small shops. In the redevelopment of the Square, the shops were kept as a means of keeping public activity within the area alive. However many other buildings were demolished along with a church. In replacing these newly vacant lots with the 'new' architecture, it was evident that Constructivism was a predominant factor in designing these spaces. But it was also apparent that climatic and cultural conditions were also becoming increasingly difficult to ignore.

Uzbekistan was recognised by architect Arkady Polupanov as being one of the unique cases in the new Soviet Union (Pugachenkova, 1993). This uniqueness was closely associated with its geographic location, and more importantly its distance from the European portion of the Soviet Union. While most major centres in the satellite republics were located in states that were geographically and culturally closer to Russia and Europe, Tashkent was easily distinguished as the one major centre in term of population and industry that was not located in the European geographical area. Consequently the institution of Soviet architecture (primarily Constructivism at the start), met with cultural and geographic conditions that demanded at least some recognition (Pugachenkova, 1993). As a result, Polupanov merged Constructivist forms and ideology with some of the local traditions.

3.3.19 Concentric Centres

The urban model for spatial organisation in Tashkent found itself with a growing number of concentric circles. Where the pre-Revolutionary city had one centre with services scattered throughout the urban landscape, the Soviet urban fabric had a very different ordering.

Tashkent had one primary node centred on Red Square. As has been mentioned this area was home to the primary governmental and administrative buildings. However the remainder of the urban landscape, in its entirety, was far from being void of importance. That is to say, outside of the centre, the urban fabric both related to itself as well as to the centre. This order manifested itself in the appearance of multiple centres within the cityscape proper (Pugachenkova, 1993).

The multiple city centres in Tashkent followed a very particular model in its implementation and growth. The model was based on the same model that was implemented for the cityscape proper, only on a

modified scale (Pugachenkova, 1993). The centre of this model was the park or the public square. Within the city proper there are numerous major parks and squares that have acted as the focal point and point of reference for this type of organisation. The first ring of this concentric circular urban model is the administrative. Generally allocated to political offices, this ring may also include governmental services such as the administration offices of the city's hydroelectric station. The next ring in the model is that including community and business life. This division includes residential dwellings and places of work. The third ring includes commercial and cultural life. Within this division one is likely to find larger scale commercial centres, sports and leisure areas, and the Palace of Culture.

While this model is by no means perfectly illustrated in each and every example in Tashkent's urban fabric the basic model holds true with slight modifications (Pugachenkova, 1993). Even within the city centre, with all of its reconstruction, the model adapts to the space available. Additionally there is an added dimension to this model. For the most part, when it has been made possible through very stages of street reconstruction, each of these have been laid out along streets that considered major thoroughfares from the city centre. These connections together comprise a network of urban order that demonstrates the influence and hierarchy of political and social order (Pugachenkova, 1993).

3.3.20 Potemkin Streetscapes

The Potemkin Village was a phenomenon that appeared in the Crimea in the 18th century. When a particular member of the Russian royal family was sent to inspect the progress of urban development in the area surrounding Yalta certain measures were taken to give this inspector the desired impression. At the time the person responsible for growth and development in the region was Vladimir Potemkin. As nothing had been accomplished in terms of development, and in order to refrain from his loss of position, Potemkin had a small army of local artisans create artificial streetscapes out of wood, plaster, paper and paint. When the inspection came to pass and the stagecoach passed through these two-dimensional villages, the impression was given that there was much more than there really was.

Many of the larger streets and thoroughfares in Tashkent's central area suffered this same fate. The street Navoi is perhaps the best example of this type of superficial treatment (Pugachenkova, 1993).

The street was designed and reconstructed only in terms of the buildings facing onto the street. Development further into the blocks beyond, and even in certain circumstances, directly behind some buildings, development stopped or was not even considered. The impression of development and social and political superiority was expressed through political offices (Ministry of Cultural Affairs) and a well-designed and maintained streetscape.

The attention paid to superficial design, and the importance allocated to fronts and facades helped lead to the demise of the Constructivist approach to design and the rise of socialist realism. Consequently importance was placed on classical and traditional elements of architectural design. The value and social meaning associated with grand columns, pilasters, and highly ornamented staircases and the like, all of which apart of neo-classical design entered the urban landscape as a means of communicating power and prestige.

3.3.21 A Dynamic Urban Fabric

As Tashkent became home to an increasing number of periods of reconstruction and superficial changes an interesting side effect of this growth occurred. As these changes took place, they were by no means pervasive. That is to say, no single influence changed the city in its entirety. Consequently in visually observing Tashkent, one is witness to many different 'styles' and eras of cultural, social and political influence, all of which are simultaneously present (Ziyayev, 1987).

As such it can be said that the visual appearance of Tashkent's urban landscape is dynamic. It is dynamic in that it chronologically, socially, politically and culturally reflects various periods and beliefs in specific geographic locations (Ziyayev, 1987).

3.3.22 The Factory

Architects of the Soviet Union believed that man [sic] would be transformed by what were called social condensers (Kopp, 1970). Social condensers included clubs, communal housing, people's theatres and alike. However the primary social condenser of the early years of the Soviet Union, and as a result a

key player in urbanisation, was the factory (Kopp, 1970). As the state was first and foremost concerned with modernisation and industrial development, the factory came to be the principle instrument of this development, and moreover a symbol of progress (Kopp, 1970).

As mentioned earlier, the rural to urban migration in the early years of the Soviet Union, was very high. Much of this migration was set upon centres that focused activity of industrial development. As a result, industrial centres with immense factories, such as hydroelectric stations or lumber mills, saw tremendous increases in population, particularly from the 1920's until World War II. Initially employed as construction workers of the factories themselves, these migrants would then stay on as permanent residents of these urban centres, and find work in the factories that they had had a hand in building. This change in social environments meant great changes in the personal and collective needs and values of these new urban residents. A different psychology, new material needs and social behaviour had to be adopted by these new urbanites if they were to live in this new environment (Kopp, 1970).

Architects played a unique role in the development of the factory and the urban area relating to the factory. Under typical circumstances, the factory, in construction, function and layout is dealt with primarily by engineers and technicians (Kopp, 1970). However as it was recognised that the factory indeed played a major role in structuring the new social order, architects were charged with treating the factory in a way that would under different circumstances be reserved for political space or social gathering space. As such, the factory was treated very differently in terms of social values (Kopp, 1970). It was not a place of labour, but a Palace of Labour (Kopp: 88, 1970).

Additionally factories in the Soviet Union were constructed under conditions that differed dramatically from those of Western Europe and North America. The level of funding for the Soviet factory, and the land on which it was located, were regarded as unlimited. This differed from the North American and particularly the European models, in that they were either under financial constraints or bounded by land limitations. Often was the case for the European factory that land was limited, which meant that industrial expansion was essentially the addition or physical expansion of an existing factory or complex. Furthermore, the factory was regarded as an urban element. While the tradition in North America and Western Europe was to locate the industrial complex (factory) on the outskirts of the city, the Soviets believed that the hydroelectric plant in particular could be located in residential areas (Kopp, 1970). As

such the factory (production of tractors, cars, food processing, light bulbs and so forth) could become, as a work of architecture, part of the urban fabric.

3.3.23 The Palace of Culture

From the very first years of Soviet power a great deal of attention was paid to the cultural dimension of the Revolution. It was felt that the modification or manipulation of culture was an integral component in the building of socialism (Khan-Magomedov, 1983). Controlling the cultural dimension of the new socialist life found its greatest outlet in the Palace of Culture, or sometimes referred to as Workers' Club or Village Club. The palace of culture was treated as both a centre in which leisure activities could be controlled and structured, and as a place of outright propaganda (Khan-Magomedov, 1983). Moreover it was felt that the palace of culture could interact with the general public in such a way as to introduce approved cultural standards regarding the private lives of Soviet citizens (Khan-Magomedov, 1983).

There were four types of palaces of culture, including: domestic ones attached to housing complexes; industrial ones attached to factories and plants; vocational ones which qualified as offshoots of trade unions, and territorial ones run by district or city councils. The territorial palace of culture proved to be the most important and as a result the most prolific. The task for the territorial palace of culture was the cultural education of the general public. In addition to having a library, a self-service cafeteria and gymnasium, these locations were also designated for special activities such as arts and crafts exhibitions, community dances and night schools for selected subject matter. Perhaps the most pertinent issue that is raised by this issue is that the activities that were organised and controlled in these places were activities that would normally be informally arranged by communities and friends on their own. As such the palace of culture entered the lives of the general urban public as both a teacher and as a member of the community (Khan-Magomedov, 1983).

3.3.24 Type F

In the 1920s with the tremendous housing shortage that plagued the urban centres of the new Soviet Union, it became apparent that solutions were desperately needed. As a result experiments and competitions in residential design were conducted amongst the leading designers, architects and planners in the country. Among these people was architect Moses Ginzburg.

Ginzburg, along with many other architects were part of the newly formed organisation referred to as Stroikom, (stroitelniy komitet) or Construction Committee for the Soviet Union (Kopp, 1970). They were charged with the task of incorporating specific social and ideological tenets into designs of major significance or scale. As a result, housing and the potential that it was seen to have in regards to social modification and restructuring, were considered to be a paramount issue and of top priority (Kopp, 1970).

Ginzburg and the Stroikom proposed five types of housing or residential units. For the most part, all five types met specific social requirements, and in general were considered to be typical in terms of conventional space standards. Only one type was considered to be a genuine innovation both in terms of spatial organisation and social content. This innovation was referred to as the F Type. The proposal that accompanied the Type F design was summarised by Ginzburg in terms of nine points that guided the work (Kopp, 1970).

1. In a country building socialism, the problems of economics are indissoluably linked with the problems of improving the quality of housing from the standpoint of increased productivity, the Cultural Revolution, and the transition to a new, socially superior way of life.
2. Careful rationalisation of the old pre-Revolutionary apartment plan, an analytical study of the way in which people use space, particularly kitchen space, can lead to savings of about 10%.
3. By exploiting the unutilised height of service areas (hallways, kitchen, bathroom) the economic efficiency of an apartment of the old type can be considered increased.
4. Our present social and economic conditions are such as to make the question of the smaller, more economical apartment particularly important.
5. It is possible to design an apartment with a living area of 27 square meters (9 person) that is just as economical as one with 54 square meters. In fact our graphs show that it is possible to go even farther in this direction. This requires a new approach to the use of space.
6. The Type F unit is important as a step along the road toward a communal form of housing in keeping with social processes of differentiation of the family and the increased use of collective facilities.
7. Solving the problem of the living unit will enable us to solve the problem of building on a community and regional scale.
8. The ideal apartment should include the following features: good lighting in all areas; thorough ventilation; the shape and size of the rooms should be a result of the living and working requirements; technical equipment should be of the highest quality.
9. Apartment design should be based on the principle of maximum standardisation of building elements and the total industrialisation of the building process.

(Kopp: 143, 1970)

However, the Type F unit went beyond these regulations. While these nine points were considered necessary for the development of the new residential unit, Ginzburg and the Stroikom decided to use techniques and methods that would resolve some of the pressing problems associated with other types. In all types of communal residential dwellings, the term communal was expressed in a particular way that resulted in what Ginzburg called social decline (Kopp, 1970).

The typical communal residential unit was distinguished by the fact that sleeping quarters, recreational areas, the kitchen, and the bathroom were all 'general' areas. This proved to result in problems such as promiscuity, social aggression, and the dissolution of the family unity (Kopp, 1970). While the dissolution of the family unit was in sync with the ideology of the time, the promiscuity and social aggression often turned the communal apartment block into a very unpleasant place to reside.

While the Type F unit made innovations in terms of economising spatial requirements (in fact resulting in more space for the individual than other types) the major change was in the separation of the living units. To be exact, only the kitchens and bathrooms were left as communal areas. Sleeping, living and personal recreation areas were segmented off to the convenience of individual families. This change was the result of research conducted by the Stroikom. Ginzburg summarised these findings by saying that it is no longer possible to compel the individual to adopt specific social behaviours and more over that the dialectics of human development must be treated gradually if a successful transition is going to take place (Kopp, 1970).

3.4 Independence & Cultural Transition, 1991 – present

This section of the thesis covers the material that concerns the state of Tashkent since Independence. The material covered in this section reflects the state of Tashkent's social plane, the political and social consequences and ideas that have resulted from the break with the Soviet government, what that means to an independent state, and how Tashkent is attempting to understand where its future lies.

3.4.1 An Independent Republic

The disintegration of the Soviet Union became inevitable in August 1991, after a failed coup attempt by Communist hard-liners in Moscow. That month Uzbekistan declared its independence. After the official collapse of the Soviet Union in December, Uzbekistan joined the Commonwealth of Independent States (CIS), an alliance of most of the former Soviet republics.

Uzbekistan held presidential elections in December 1991, at the time of the break-up of the Soviet Union. Islam Karimov, the incumbent president, was re-elected by an overwhelming majority of the vote. Most political groups in opposition to the PDP (Progressive Democratic Party) were not allowed to offer candidates. The sole exception however, was Erk (Freedom), which nominated Muhammad Salih. Karimov, however, controlled the press and other vital organs during the campaign. According to official election results, Salih received only 12 percent of the vote. After the election, Karimov proceeded to establish an authoritarian-style regime. His government sought to crush political opposition, for example, by banning all genuine opposition parties in the early 1990s.

Karimov justified the clampdown on political opposition in 1992, by claiming that allowing for more freedom would leave Uzbekistan vulnerable to the spread of Islamic fundamentalism. Karimov pointed to the civil war in neighbouring Tajikistan, claiming that violence could also break out in Uzbekistan without strict controls on political activity.

In January 1995 President Karimov announced that the government would not object to the formation of blocs within the Oliy Majlis (Supreme Assembly). Subsequently, two new political parties were created: the Adolat (Justice) Social Democratic Party and the National Revival Democratic Party. However, these parties were not considered true opposition parties. In a referendum called by the assembly in March 1995, voters approved putting off presidential elections until the year 2000, extending Karimov's term until then. In April a group of activists affiliated with the outlawed opposition party Erk (Freedom) were given lengthy prison sentences for allegedly conspiring to overthrow the government by force. Meanwhile, Uzbekistan proceeded slowly with reforms to transform its Soviet-developed, centrally-planned economy to one based on the principles of a free market.

3.4.2 Perestroika

There is no longer the country in which perestroika was started. There is no longer the political system which perestroika was about to transform. There are no social forces, which would make it the goal to revive the policy of perestroika. Perestroika will remain however, for a long time, a source of interest for all those who are interested in history or in scientific investigation (Yakovlev, 1998). The lessons of perestroika are not so much those of an analysis as they are practical conclusions. In order to understand perestroika one must recollect what perestroika 'was' for certain people and what it 'has become' (Yakovlev, 1998). Or to put it another way, to understand what perestroika was subjectively, in the ideas and intentions of those who originated it, and what it has become as a certain set of results.

3.4.3 What was Perestroika?

Several answers are commonly given. One answer is that perestroika was a conspiracy organised by the CIA, and by the West in general that aimed at military/political subversion of the Soviet Union and of communism in general (Yakovlev, 1998). For many this conspiracy had very active participation by world Zionism and was furthermore considered 100 percent successful (Yakovlev, 1998). This sort of explanation stems from understanding the world as being bipolar with respect to the past. This approach also projects this bipolar vision of the world into the future (Yakovlev, 1998).

Another explanation of perestroika is that it was 'foolishness', probably caused by good intentions that eventually resulted in an absolute lack of responsibility (Yakovlev, 1998). Those who adhere to this explanation would state that the "perestroika people" did not know the real situation that existed in the country. Consequently, these people were unable to find the right factors and mechanisms that guide real life in the Soviet Union and, as a result, their myopic behaviour ended in political recklessness (Yakovlev, 1998).

Perestroika has also been explained as a 'beginning' of historical significance. This explanation regards perestroika as noble in its goals, courses, and extensions, but that its true significance, true scope, and true consequences will become clear only in the future (Sodullayev, 1999).

3.4.4 The End of Communism and the Emergence of Democracy

At least two common traits can be traced in most of the explanations put forward concerning perestroika. Firstly, most explanations are in some fashion a form of evaluation (Sodullayev, 1999). They are evaluations that are given on the basis of certain political or ideological preferences. They are based on personal or group preferences, but not on preliminary analysis, nor on knowledge, nor on penetrating into the truth of phenomenon (Sodullayev, 1999). In many cases explanations are offered with the intention of stepping away from scientific analysis. Secondly, any evaluation has produced a form of 'from inside perestroika' and 'from inside relations' which were brought to life by perestroika (Sodullayev, 1999). Those who share either of those positions are regarded as trapped in the time in which they live, in the political process, of which they are participants, and from the place they hold within the political process. Such observers of perestroika are regarded as subjective. Efforts should be made to identify what perestroika was trying to change and what it actually has changed in a broad social and historical perspective (Sodullayev, 1999).

In its broadest evaluation perestroika has come to mean the end of communism (Sodullayev, 1999). Moreover it means that the totalitarian state that was brought about under communism has dissolved, and that there is no longer a lack of freedom within the Soviet Union. The collapse has apparently removed all the problems and all the questions that were in the minds of Soviets for decades. In this sense, it would be senseless to evaluate the lessons of perestroika, because one can draw no conclusions as to the validity of this 'removal of all social and cultural problems' (Sodullayev, 1999). In this case, perestroika itself takes on anecdotal dimensions.

One can understand the reformation movement in the Soviet Union when one recognises issues that are politically unpleasant (and associated with the Soviet Union), but nevertheless exist in the current conditions in the newly independent states. It is true that communism is in a very deep crisis which touches upon both its practice and its ideology (Sodullayev, 1999). It is true that it has created many ugly things, but it has nevertheless continued to exist in various forms. It no longer exists in the countries of Eastern Europe to which it was 'imported'. It does however continue to exist in a very specific form of the psychology of hope in those areas (China in particular) in which it originated under the influence of 'domestic' rather than 'outside' factors (Sodullayev, 1999).

Arguably, communism does not seem to suffer any outwardly visible crisis in China and in North Korea (Sodullayev, 1999). It also seems to keep its standing in Cuba. It is trying to reform itself in Vietnam and in China. Conversely it does drive several civil wars for it's own survival, most notably in Yugoslavia, Georgia, and Azerbaijan (Yakovlev, 1998). It has sacrificed the party in power in the Soviet Union, but it has actually maintained control over many important walks of life in general, and social life in particular. In this context, the most notable examples include Russia, the Ukraine, Belarus, and Uzbekistan.

Equally uncertain is the belief that the collapse of communism equals the collapse of totalitarianism. It is true that Stalinism is a synonym for totalitarianism, but it is equally true that pre-Revolutionary Russia (and its tsarist colonies) cannot be considered a democratic state (Sodullayev, 1999). There have been a number of states in the twentieth century that were market economies and were non-communist, or even anti-Communist, but which were very still cruel dictatorships. In other words, the collapse of communism is not the same as the emergence of democracy and it does not make a population free from the possibility of the emergence of new dictatorships (Yakovlev, 1998).

3.4.5 The Rational Basis and Idealistic Intentions of Perestroika

It is true that perestroika as political doctrine and as practice has appeared on the basis of the 'socialist idea' and on the basis of the 'socialist mode of implementing that idea in life' (Yakovlev, 1998). It is also true that in the very beginning Perestroika's premise was not destruction of "real socialism", but an improvement on the basis of "humanitarian rationalisation" (Yakovlev, 1998). Whether this is the case or not, these were the initial intentions and initial outlooks of the reformers. It was only in the course of time that these intentions were bound to change to a more conservative posture or even more a radical one. These days one can judge perestroika not only by its intentions and its ideas but also by the practical deeds that it in fact undertook (Sodullayev, 1999). In terms of practical deeds Perestroika stressed rationalisation of doctrine and the exclusion of all sorts of dogmatism and of scholasticism. This was a conscious decision that stemmed from the assumption that 'sensible society' can be built up only by sensible, critically minded people (Yakovlev, 1998).

This posture was also based on the assumption that perestroika was not only meant to solve the problems of the economy, political system, or foreign policy, but also it was assumed that perestroika could function as a sort of socialist Protestantism, without which perestroika would not have historical prospects (Yakovlev, 1998). It was assumed that perestroika not only needed this sort of reformation but in fact started this reformation, and as a result was a stimulus for its development.

Perestroika's central goal was democracy. It was a 'central' goal, not a 'tactical' one. The fundamental strategy of achieving this goal stemmed from the understanding that it is the lack of democratic 'basics' that is the source of all the difficulties, all the troubles, and all the problems that exist in the current former Soviet Union. The introduction of the market economy, for example, was considered not a goal in itself but as a kind of guarantee for the establishment of democracy.

Perestroika also made quite a conscious effort at a non-violent course of reforms. It stressed the 'reformational' beginning, not the 'revolutionary' type (Yakovlev, 1998). This was not because of the particular personalities involved, but was due to an understanding that revolutions most frequently result in the opposite of what was originally intended (Yakovlev, 1998). It stemmed from understanding that revolution is incompatible with democracy and that it is extremely costly and terribly inefficient. When the former CPSU (Communist Party of the Soviet Union) still existed, revolutionary courses of transformation would have strengthened precisely those features of the system that were targeted for change (Yakovlev, 1998).

3.4.6 The Weakness of Perestroika

Perestroika can be regarded as something bigger than just an ordinary political clash between conformists and conservatives, between democrats and neo-Stalinists, between communists and anti-Communists. It would be impossible to assign clear-cut political boundaries. Democrats frequently happen to be conservatives, communists happen to be reformers, and anti-Communists, reactionaries (Yakovlev, 1998).

These seeming paradoxes could be explained in a very simple way. Perestroika has focused within itself, three planes, three trends, and three directions of problems. Very conditionally, they have been

named as follows. First is the struggle for priority either of ideology or of common sense. Second is the struggle for supremacy either of the party or of the state. Third is the struggle for redistribution of power and property. In part, this multiplicity (so many planes, so many trends of confrontation) is due to the objective tasks of perestroika that existed within the 'perestroika process'. However it was in part conditioned by a reaction (to perestroika) on the part of the former power structures of the CPSU and of the former Soviet Union. The goals and tasks that were put forward by perestroika, objectively, for the next stage of perestroika, would have touched upon the relationship between the party and society, between the party and the state and between the state and society.

One may talk about contradictions between the party and the state, between the church of Bolshevism and the civic state (Yakovlev, 1998). Victory was won by the civic power, and this civic power cannot even imagine a situation where neo-Bolsheviks could come back to power again, even if they have overcome the kind of diversities they have among themselves. When civic power had achieved the upper hand in the Soviet Union, a political struggle started that reshaped political power and property. This was caused by the new situation created after perestroika. Yet this struggle is going on not in society in general, but within the ruling elite of the society. Of course, clashes of opinions and interests are not restricted just to the members of the elite; concentric rings are formed around them.

The major struggle is going on not at the mass level, but within the elite itself. People who state nowadays that "perestroika was supported morally and politically by the people", are correct (Yakovlev, 1998). But the people did not support perestroika by means of direct actions. Reserves of enthusiasm and trust were exhausted rather quickly. Moreover finding a position in relation to perestroika, on the part of party and state apparatus, produced disorientation in society. These kinds of political clashes, which are still going on, damage reforms very significantly (Yakovlev, 1998).

The majority of the population did not speak out in support of the CPSU, or in support of the Soviet Union. People also kept quiet when the party and then the state first collapsed. One conclusion can be drawn here. That is that the major mistake of perestroika stands with the fact that it did not work sufficiently energetically or purposefully towards creating its own mass base or social and political support (Yakovlev, 1998). In the first stage of perestroika only the force of a totalitarian party could break up the totalitarian system.

At the next stage of perestroika, mass social support was necessary, but was not created. Perestroika from the very beginning, and up until the very end, remained a revolution 'from above' (Yakovlev, 1998). It was an attempt to execute all the reforms from above, and it was done in the hopes that people would follow the enlightened rulers.

3.4.7 The Future

It is now of key importance to look at the situation in present-day Russia and her former republics, from the point of view of those broad tasks which were put forward by the reformation Sodullayev, 1999). These 'broad tasks', that perestroika wanted to achieve include: free individuals and a free society; democratic political system; the rule of law, not the rule of individuals; definite absolute supremacy of law; a modern economy, which would include all types of property; liberation of society from the supremacy, (spiritual and practical), of state over both society and individuals; and maximum possible opportunities for self-realisation of property, both quantitatively and qualitatively (Sodullayev, 1999). It is enough just to mention all those goals in order to appreciate what is being talked about in practical terms. Many of these issues have not yet been approached, and for a number of issues there is a backward movement, especially in those relating to the everyday life of people.

Real reformation of Russia and the republics is still a few years in the future (Sodullayev, 1999). Free people and a free society must be brought about over generations throughout society. One cannot become free by decree, by law, by anybody's intentions, or even by one's own will. The governing force in practice is not freedom, but license and liberties. That is to say anarchism, genuine anarchism, absence of discipline and the very habit of self-control, after so many centuries of living in the conditions of some sort of repression, has appeared. These liberties or licenses always turn out to involve the deprivation of somebody else. Moreover, often what happens, rather easily under such circumstances, are attempts by the authorities to establish their own monopoly at whatever level of power they can. That is to say, it can be considered that only the first step has been taken towards 'freedom' (Yakovlev, 1998).

3.4.8 Autonomy

While Uzbekistan has been free from the totalitarianism of the Soviet Union that had plagued it for more than seven decades, for nearly a decade now, the question remains as to whether the urban environment of its major centres has also freed itself from this ideology. Moreover, one may question whether the dismissal of totalitarian or constructivist architecture means the acceptance of a post-modern urban language or something completely different. Just as perestroika resulted in the dismissal of totalitarianism, and does not necessarily mean the democracy, so too can one question whether the rejection of a foreign urban language means the acceptance of one's own native language, or more importantly the acceptance of another (foreign) language. If the latter is the case, then it is likely that Uzbek cities are prepared to accept a Western interpretation of the post-modern city. If the former is the case, and the rejection of Soviet culture and urban design means the acceptance of a native architecture, then the question only changes very little. In this case the 'native' language will nevertheless be interpreted in a contemporary way. No one is considering building contemporary Tashkent out of brick and mortar. Additionally this would mean the contemporary interpretation and adaptation of what was a native language. In a very real sense this process may be interpreted as postmodernism.

There is however the question of autonomy socially, culturally and architecturally. While the evidence that perestroika presents, provides one with a sense that to some degree a new ideology has been accepted, and as a result (at the current time) limited results have been demonstrated in social and cultural circles. What remains is how this acceptance of a new ideology has made itself present in urban and architectural design. The contemporary understanding of autonomous architecture will be briefly discussed below.

3.4.9 Space

Autonomous space raises a number of interesting questions. Firstly one is forced to consider the existence of space as a material thing. Does space exist in the same manner as built form, in that it can be assigned social value and function (Tschumi: 54, 1998)? If one considers that space can be assigned such

function and value, then one must also consider the state of space when it is not assigned function. Does it only become a material thing when it is defined by function? This is of particular importance to semiotics in that it becomes necessary to discover whether or not there is in fact a language of space.

3.4.10 Use

Use, function, event or program - all may be used to describe the primary and secondary functions of built urban forms. When discussing autonomy with regard to use or function, one begins with the notion that an artefact, whether it be a house, an office building or a outdoor café, can exist without having a particular function assigned to it. In other words, while the house, office building and café are identified (at least in part) by their function (use), would it be possible to create an urban form where the use is as yet unidentified? Can one live in a space not designed to function as a living space (house)? Obviously one may first question the validity of such inquiry. Why would someone build something and not know what it is? This may not seem such an unreasonable proposal when one begins to understand that often spaces and artefacts are not used for their 'intended' function. The example of the indoor toilets distributed amongst the rural Italian villages being used for cleaning grapes and not as a lavatory, demonstrates this fact.

But more importantly this raises the question of how space and form can come together to form a 'place' without having the function defined? Can one treat space in the same manner as the early human treated the cave, in that a space was an identified, a function was carried out in that space, and as a result that function defined the function of that space (Tschumi, 1998)?

3.4.11 Form

Form follows function. This is a tenet of urban and architectural semiology that has been discussed earlier. However, can one produce space that is not functional? In saying that a particular form is devoid of function, one is admitting that that form is devoid both of primary function and secondary function, this raising the issue that Geoffrey Broadbent (1986) defines as the impossible existence of the

'non-signifying object'. While Broadbent refers to this type of formal semiotic autonomy as 'impossible', it nevertheless charges the imagination to reason out 'why'.

3.4.12 The 'West' and their Conception of the City

During the time of the Industrial Revolution the urban metaphors and cultures of the West recognised the primacy of the natural organic form in the conception and construction of their cities. In 19th century France for instance, both zoomorphic and anthropomorphic analogies rose to popularity in urban culture and in urban form. Examples of this were seen in the ascendancy of the natural sciences and in their application to the functioning of the city.

From the late 19th century to the inter-war period, a new urban (cultural and formal) aesthetic was accommodated, which came to be called the machine aesthetic or the machine metaphor (Ellin, 1996). The 'machine' emphasised the 'function' and found its aesthetic in the inner workings of culture and form. This corresponded to the movements of rationalism and constructivism that were gaining presence in both the Soviet Union and in other parts of Europe and North America. This era of scientific thought saw a number of significant changes for those that were responsible for the stewardship of the urban environment. Foremost in the minds of these people were the needs of the people (Ellin, 1996). Through a scientific approach to whatever urban/social problems arose, a solution, or rather a wide-ranging solution could be designed. Moreover it was in this era that one saw the rise of a new urban/social expert, the city planner, appear in full involvement in the city. Additionally these experts (planner and architect) saw a new interpretation of their roles (Ellin, 1996). The architect tried to emulate the engineer and the planner, the natural scientist.

The post-industrial economy and Information Revolution have challenged the validity of using the scientific approach to urban culture and form (Ellin, 1996). No longer are geographic boundaries and population densities of 'key' importance to the resolution of the urban scenario. Further the technological and economic changes that have marked this era have as such demonstrated remarkable ideological and fundamental transformations (Ellin, 1996). While technology as an industry has grown dramatically, economic activity has shifted in such a manner as to now, in our (Western) current era, there is a dissolving

of political boundaries, and a fortification of economic barriers. It is said that North American culture in particular is becoming more polar in its urban economic appearance (Ellin, 1996). Examples of this can be seen in most major urban centres in either the USA or Canada, where homeless persons and the financially affluent can be seen operating in the same geographic environment. More importantly though, this is by no means strictly a Western phenomenon. This trend of economic bi-polarisation of the classes in urban environments has spread to nations of the Developing World. Consequently the Developing World is no longer located in a specific geographic or cultural area, rather the Developing World and the 'First World' can be said to be living side by side (Ellin, 1996).

The post-industrial era is marked, not only by these economic and technological changes, but also by the attitude toward consumption, both on an individual basis as well as on a national or global basis (Ellin, 1996). This shift marks one of the major differences between the industrial society and the post-industrial society. Where the industrial society was characterised by production, the post-industrial is characterised by consumption. This shift in attitude has also made itself present in the dissolution of traditional boundaries, be they political or geographic. More importantly this has entered the ideologies of urban cultures (Ellin, 1996). It is suggested that there are no longer the political dualities of the 'left' and the 'right' and that 'high' architecture and pop art are often interpreted as the same (Ellin, 1996). This shift in architecture has been referred to as the commodification of architecture (Ellin, 1996).

Additionally these changes have been accompanied by a shift from the centre to the periphery. This is felt both in the form of the city as well as in its content. The form of the post-industrial city is moving in concentric circles outwards from the centre. The development of suburbs and ex-urban areas is testimony to the fact that the centre no longer plays the cultural role it once did. Further, the content is shifting in a likewise direction. The once marginalised social groups (gays, visual minorities, women, etc.), who were classified as the social periphery are now finding solace as part of main stream culture.

3.4.13 Derrida & Deconstruction

Jacques Derrida challenges the modernist viewpoint of meaning in the built environment with Deconstruction. The notion that signifier and the signified are tightly linked, according to Derrida is not exactly correct (Ellin, 1996). Rather, Derrida say that signifiers always become signifieds for other signifiers and vice versa, resulting not in a final signified, but in an infinite chain. Consequently Derrida feels that the primary form of post-modern discourse is the collage (Ellin, 1996). The collage requires the audience to participate in the production of meaning while minimising the authority of the author.

CHAPTER 4
TACTICS

4 Tactics

This portion of the study deals with the measures taken to collect and assemble data regarding information directly related to a semiological analysis of urban space in transitional cultures. The chapter is broken down into three primary sections: a case study; the study area; and the methods used in collecting semiological data within the study area and within the parameters of this thesis.

4.1 A Case Study

This section of the thesis covers the material that in large part creates the structure for the way in which data was collected and the choice of data for the analysis. This portion of the work reviews case a study method and the author determines what parts are needed to address the issues covered in this thesis, and how this case study fits into the case itself.

4.1.1 A Bounded System

A case study, according to Stake (1995), is an exploration of a bounded system or case over time through detailed, in-depth data collection involving multiple sources of information rich in text. By bounded system it is meant that the case is bounded by time and place. Referring to the study as a 'case' denotes a program, event, activity or certain individuals. As such, a case study will include a number of different methods of data collection. Some of which may include observations, interviews, audio-visual material, documents and reports.

The measures taken in this thesis certainly fall under the category of case study. Based on the list of possible methods used in data collection that Stake has provided, observations, visual material, interviews and archival documentary reports are all used in this semiological study of urban space.

4.1.2 Context of Case Study

In analysing and describing the case, the investigator must set the case within a particular setting. The setting or context of the study may be very broad, such as historical, social or political, or the context may in fact be very narrow, such as a family, a physical location or a specific time period in which the study is to occur.

The selected case will demonstrate a context that is narrowly conceptualised. This thesis is, in its broadest terms, an exercise in semiological analysis of urban space. But at the same time this study specifically examines cultures experiencing transition from cultural and political hegemony (colonialism in its broadest terms) and how the language of the urban space is influenced by these conditions.

In order to create a setting or context that will allow for an understanding of the circumstances that influence the case, it is necessary to illustrate the historical situations and contexts that have contributed to the current condition. As a result, this thesis sets up the case with these historical influences in particular view. The pre-Soviet era of Tashkent's history allows the investigator to understand the basic palette of urban semiotic language at its foundational level. The Soviet period describes the second layer of meaning in Tashkent, and simultaneously portrays the influences of colonialism, which are pertinent to this study. The last section in setting up the context deals with the recent period, the time since political independence. This section is the thrust of the analysis and allows for a brief description of the current context. Though this section is ultimately the focus of the study, it must nevertheless be brief, as the fieldwork done in this case study will provide the foundation for illustrating the current condition.

Additionally the intervention that is part of this thesis (see Chapter 6) constitutes the investigator's opinion on urban space, meaning and place-making, based on the results that are gathered and summarily analysed within the parameters of this study. The intervention will therefore be viewed as a discursive tool. It will provide a series of options regarding the semiotic language of transitional urban space based on the

current condition. It will be understood as a discursive tool in that the options may be understood only in terms of their general ideas or as base lines from which future development can take root.

4.1.3 Structure of the Case Study

The overall structure of this case study largely follows the structure set out by Stake (1995). Stake refers to this particular type of framework as the overall rhetorical structure. While case studies vary in their structure quite dramatically, there are some basic principles that Stake demonstrates as being key to most case study types. This case study accommodates this basic structure in the following way.

Firstly, the case opens with a vignette that allows the reader to develop an interest in the material of the study. In doing so the reader is introduced to the basic material of the study and will use this information as a reference point to which he/she can come back to when dealing with more abstract or complicated material. In this case study this is done in chapter 1, the Introduction. In this chapter the reader is introduced to material covering semiotics of the built environment as well as a brief introduction to Tashkent, Uzbekistan.

Secondly, Stake suggests that the investigator identifies the issue, the purpose, and the method of the study in order for the reader to come to an understanding as to why this investigator is interested in this material, and what it may offer the reader and others. While this section of the structure is divided among Chapters 1 and 4 in this case study, the portion that exists within the first chapter offers enough of an outline to make the aforementioned issues, purpose and method apparent to the reader.

The third portion of this structure deals with the detailed description of the case. Stake suggests that the level of detail and depth of the description, while relative to the material, must be approached with enough vigour to make the case, and the elements within the case, as clear as possible to the reader. In this case study the reader is introduced to material covering firstly the field of semiotics and semiotic analysis of the built environment. As much of this material is very abstract to the average reader, the material is presented in such a way as to make it more accessible. This is done with clear and available examples.

The material that follows covers the Tashkent experience. It begins with a basic outline of material artefacts that comprise the traditional Uzbek City and ends with a brief reference to the societal factors that contributed to the development of the city and its spatial organisation.

The next portion of the structure deals with issues that are more complex and that relate more closely to the subject matter of the case study. In this case study the thrust of the work focuses on Soviet cultural hegemony in Uzbekistan (Tashkent). As such the material covering spatial organisation and the development of urban material artefact in Tashkent under Soviet social and cultural conditions is dealt with in much greater detail than the initial outline of Tashkent's initial development.

Following this material is the section dealing with Tashkent's urban experience since political independence. This material covers the societal and cultural conditions associated with political independence and how this is reflected in spatial organisation and the mediation of material objects. This portion of the description will purposefully be brief. The purpose of this section will ultimately be to set up a basic framework within which a portion of the data collection and analysis will take place.

The next section of the structure deals with even more selective material in even greater detail. This section corresponds to this case study's data analysis. In the data analysis the material gathered in the data collection process concerns the semiotics of material objects and spatial ordering in Tashkent during its period of political transition. Within this analysis individual artefacts will be examined and conclusions based on this examination will be drawn.

Stake regards this portion of the structure as the place where assertions are made and conclusions about the case are presented. This section corresponds to this case study's Intervention chapter. As this is a thesis, the investigator is obligated to present his/her interpretation of the material under scrutiny with an application of knowledge or a form of mediation. This is precisely what the intervention proposes to do. The intervention is the investigator's understanding of urban space and material objects in transitional Tashkent applied to a mediation of future development. Vignettes of potential future spatial organisation and urban artefact demonstrate the investigator's point of view. As such it will be made apparent that the intervention is not a concrete proposal, but rather a discursive tool to which future development and discussions regarding development can refer.

Lastly, Stake points out that the investigator should conclude the case with a closing vignette that emphasises that this study is one person's interpretation of the material. This case study concludes with a summary that extends from the intervention. It would seem that the chosen format diverges somewhat from Stake's structure in that the intervention could be considered the closing vignette given what it has to offer.

4.1.4 Purposeful Sampling

Stake refers to purposeful sampling almost in the same terms as one sets out to determine the subject matter of a thesis. That is, Stake emphasises that the investigator should clearly specifies the sampling strategies used and their rationale both unto themselves and within the context of the case.

The sampling strategies used in this study are cartographic, photographic and by means of a semi-structured interview. The cartographic analysis provides several layers of information. Firstly as a means of understanding space, the 'map' as it is represented by its respective authors in their respective chronological periods will reveal the social and cultural values that privilege certain qualities of space and artefact. When such maps are examined both in terms of function (social need) and figure-ground (cultural values and beliefs) the investigator is able to dissect the cultural plane as it is reflected and represented in the built environment. Additionally, viewing an urban space in two dimensions, rather than three, will allow for a clearer understanding of how social and cultural conditions (planes) converge to create places (points).

As this study deals with the changes that have occurred in the language of the built environment since political independence in Uzbekistan, it would seem incomplete if the urban environment were not analysed in terms of its new (shifting) social needs and cultural beliefs. As such, the cartographic analysis provides the bridge between the amorphous (social and cultural planes) and the morphed (urban space).

The photographic survey provides material for an analysis of urban artefacts in the language of their respective chronological periods and how they may be interpreted by a changing (independent) culture(s). The survey provides images that demonstrate examples of communication through architectural manipulation of space. As it is in the three-dimensional world that the population of Tashkent interacts with its environment, it would seem necessary to analyse 'the urban' at this level. Furthermore, providing this

type of analysis will complements the cartographic survey in that the two layers (three-dimensional and two-dimensional) work together in generating the space. While the cartographic survey analyses the organisational principles of urban space and artefact, the photographic survey of the same space analyses the specific components (artefacts) that are organised (in two-dimensions).

The interviews with the selected urban designers and architects will provide material for an analysis of the opinions and current guiding values and practices of the cultural mediators. As the urban designer/architect can be considered as mediator or steward of the built environment, it would stand to reason that tapping their collective attitudes, preferences, biases and understanding of the current socio-cultural condition can offer material essential to the understanding of the forces behind the product of the urban artefact and the space within which people live and work. In sum, interviewing the urban designer/architect allows the investigator to clarify the relationship between production of artefact (and space) and the mode of production responsible for that artefact (space).

4.1.5 Instrumental Case Study

An instrumental case study is one that is conducted focusing on a specific issue rather than on the case itself. As such, the case becomes the vehicle to better understand the issue (Stake: 1995). This type of case study distinguishes itself from an intrinsic case study, which focuses on the case itself because of its uniqueness or unusual interest.

As this research subject is the study of urban spatial language in cultures experiencing transition (using Tashkent as an example), and not a study of Tashkent, it can be understood as being instrumental. It is instrumental in as much as it contributes to an understanding of post-colonial (post hegemonic) urban spatial language. As post-colonialism (from a semiotic point of view) is rarely dealt with in terms of the former Soviet Union, this study can make a substantial contribution.

4.1.6 Forms of Data Analysis Associated with a Case Study

Stake advocates that an analysis must above all else illustrate a detailed description of the case and its setting. Furthermore if the case presents a chronology of events, he recommends analysing multiple sources of data to determine evidence for each step or phase in the evolution of the case.

Stake points out four means of data analysis and interpretation associated with case study research. *Categorical aggregation* refers to a form of analysis where the investigator looks for a collection of instances or events from the data, with the hopes that meanings relevant to the issue at hand will become apparent. In the second form of analysis the investigator looks at a single instance and draws meaning from that instance without looking for multiple instances. This form of analysis is referred to as *direct interpretation*. It also entails the pulling apart of data and reassembling it in more meaningful ways. Thirdly, the investigator may establish *patterns* and look for correspondence between two or more categories.

Lastly the investigator may develop naturalistic generalisations. These are generalisations from which people can learn for themselves or apply to a grouping of other cases.

It seems that any body of research conducted under the guidelines of a case study could use any one of these means of data analysis and interpretation. However it would also seem that the choice of data interpretation methods would depend on the type of research being conducted. In other words the theme of the research or more importantly the type of data collected dictates to some degree the type of interpretation.

It also seems to be the case that with the exception of the contrary nature that exists between categorical aggregation and direct interpretation, there is room to have more than one type of analysis occurring in a single case study. This is certainly the case in this thesis.

In conducting a semiological analysis of urban space the author intends to look at a cross section of a number of different types of cultural meeting places has been examined. This includes political space, leisure space, private living space and commercial space (see section 4.3). Moreover this study looks for common characteristics of change in the urban vernacular, both at the level of Soviet hegemony and at the level of the current internationalisation of Tashkent. As such it seems that the type of data analysis needed is two-fold, but with three forms of analysis as follows.

Firstly there is a dual action between the categorical aggregation and the patterning of data gathered. In order to understand how an urban language is altered or modified by a hegemonic culture it seems necessary to examine various types of urban artefacts and space. In doing so the data gathered may be both categorised according to urban type (political, commercial, etc.) and then a cross-examination can occur. This cross-examination is essentially patterning. The analysis would thus look for similarities in the changes that occur across types, thereby distilling the changes in urban language down to a process that can be generalised as a discursive tool and which can be applied to other cases. This of course is the second part of the two-fold process. Naturalistic generalisations enable a complex process or problem to be simplified in an effort to enable the material to move from one case to another. This is the process accepted as data analysis within this case study.

4.1.7 Triangulation of Information

According to Denzin, (1970) in qualitative research, the convergence of sources of information views of various investigators and different theories (and processes) represents the triangulation of ideas. Stake puts greater emphasis on the sources of data. He states that the investigator should make an effort to triangulate based on the sources of data and the data situations that exist in the specific case.

In this thesis there are a number of different sources of data. Firstly there is the photographic analysis of the various categories of cultural meeting places. Secondly there is a cartographic analysis of Tashkent and specifically its city centre. Thirdly there will be a set of interviews with various urban designers and architects responsible for both Soviet and contemporary urban space and artefact. (For a detailed description see sections 4.4.1, 4.4.2, 4.4.3).

Each of these sources of information will contribute to the understanding of the space and issue under scrutiny, and demonstrates an understanding of urban language from various points of view in a given chronological period. Using these three primary sources of data it is possible to triangulate the information gathered, and thereby contextualise the data in terms of its cultural and chronological biases.

4.1.8 Comparative Approaches

Stake identifies five different approaches to qualitative research. In addressing the value of using the case study method (as opposed to other methods) it would seem worthwhile to briefly explore how the five approaches differ and the value 'a case study' has for the subject matter that is under scrutiny in this thesis.

Stake has broken up the comparative research approaches into categories within which specific qualities of each approach can be compared with others. He presents the 'focus', 'discipline origin', 'data collection', 'data analysis', and 'narrative form' as the dimensions of qualitative research. Using these categories he compares five different qualitative research approaches including: biography, phenomenology, grounded theory, ethnology and case study.

At the most fundamental level the five different approaches differ in what they are trying to accomplish (Stake, 1993:64). While a case study's 'goal' is to develop an in-depth analysis of a single or multiple case, other approaches range in their scope of interest. Phenomenology attempts to understand the essence of experiences about a phenomenon (Stake, 1993:65) and a biography explores the life of an individual. As the goal of the Tashkent case study is to analyse a specific occurrence in a specific location, with particular circumstances and with the hopes of using the information gathered from this study to apply to a broader set of circumstances and advanced learning regarding the theme of this study, it would seem that either the ethnographic approach or the case study would be best suited. The ethnographic approach, while maintaining a similar focus (describing and interpreting a cultural or social group), it differs primarily in two important ways.

The data collection used in ethnography is composed primarily of observations and interviews. While a case study uses both of these techniques, it by no means privileges these techniques over others. Moreover the case study uses as many sources of information as the study can afford. This is the case for this thesis. If in fact observations and interviews were the sole means of data collection (or even the primary means) then the level of depth that is necessary for this study to develop 'a case' that can potentially be used and scrutinised by others would be lacking.

The data analysis used in ethnography also seems to be structured in a way that would not be as conducive to this thesis compared to a case study. Ethnographic data analysis, while sharing (with a case

study) 'description' as part of the analytic process, requires interpretation, whereas a case study requires assertions. The basic difference in this is that this thesis endeavours to treat the final product as a discursive tool, a means of initiating discourse on the themes raised in the study. In order to achieve this type of discourse certain assertions would seem to be necessary. In other words it requires the investigator to take a particular perspective on the themes and present them as such. Simply recounting what 'is' would likely fall short in creating an effective discursive tool.

Additionally there is what Stake (1993) refers to as the overlap that exists between an ethnography and a case study. He clarifies the two by distinguishing between a bounded system (a case study) and the examination of a cultural system (ethnography). The problem, as Stake points out, is in regarding both approaches as 'system'. An ethnography examines a cultural or social system in its entirety. A case study on the other hand one works with smaller units, such as a program, an event, activity or individuals, while exploring a wide range of topics (Stake, 1993). While cultural behaviour may or may not enter into the range of topics in a case study, it is essential to an ethnography.

4.2 The Study Area

The study area is defined as follows (refer to figure F). The street Hamza, formerly known as Karl Marx Street, provides the spine of the study area. In other words, all points that will be used in the analysis, both of artefact and of space (both photographic and cartographic) are either directly located on this street, or immediately adjacent to it. The street is referred to as Hamza, unless citing Soviet references in which case the street is referred to as Karl Marx.

Hamza runs from the base of Red Square, through (or adjacent to) all the points of analysis, to the Bazaar Selmash. The length of the study area is approximately 2.4 kilometres long, and in width extends 140 metres in opposite directions from the spine (street itself). The study area is not regarded as a zone wherein the analysis covers all built artefacts and spaces within this zone. Rather the study area is regarded as a set of parameters within which the selected artefacts and spaces are located.

The study area (Hamza), was chosen as it provides a single area within which the examples of all three chronological eras can be found, and from which clear, accessible examples of primary functions

typical of each era can be examined. Moreover, Hamza to date marks the centre of Tashkent and functions as both a transportation thoroughfare and a pedestrian boulevard between Red Square and Revolution Square.

4.3 The Cultural Meeting Place

In defining 'a cultural meeting place' it becomes necessary to create very particular boundaries, ones that may or may not correspond to other definitions of meeting place or cultural place, or cultural meeting place. This however is the nature of defining a term within the parameters of a case study and more importantly, within the parameters of this thesis.

For the purposes of this case research 'a cultural meeting place' is defined in terms of its primary function, irrespective of chronological location. As such the cultural meeting place adheres to a set of given primary functions as established by this investigator. Furthermore, the cultural meeting places are nevertheless categorised in terms of their chronology, i.e. there are examples of cultural meeting places that typify through primary function one of the three eras (pre-Soviet, Soviet, post Soviet) that have generated particular artefacts normally associated with the corresponding primary function. Additionally examples are chosen that also exhibit the qualities of secondary functional transition. This is to say that the examples demonstrate a primary function indicative of the era that produced that function, but at the same time have over time changed their means of connotative signification (secondary function). As an example, the Selmash Bazaar, though constructed in 1993, is categorised by primary function as a pre-Soviet artefact, but whose secondary function has changed. Alternatively, Amir Timur Public Park, built in the 1960s (Soviet era – originally called Revolutionary Square), is considered as a Soviet artefact in accordance with its it primary function, despite the fact that it has been superficially rebuilt and renamed since Independence. Essentially the chronological categorisation of these artefacts and spaces follows a chronology of primary function, rather than date of construction.

There are three generalised primary functions that are used in the choice and analysis of meeting place. Two of these three are functions that are common to all three eras, while one that exhibits a primary function that best characterises a particular era. The two common primary functions include living space

(or residential space) and informal social gathering space. As these two primary functions are not only common to all three eras under examination on this study, but common to most urban areas throughout the world, these fundamental artefacts (and or spaces) are used to demonstrate the findings of the semiological analysis in terms that are easily accessible to the readers of this document. Moreover, as the findings of this study act as a discursive tool regarding the semiological development of urban space, choosing examples that are readily understood by the reader is an essential quality of the artefacts under scrutiny.

The third primary function that is used in the selection of urban artefact/space that best characterises the era of which it is a product. While there may in fact be many examples of primary functions that are particular to a given era, examples once again are chosen in term of their accessibility, and ability to be transposed cross-culturally. In the pre-Soviet era this example is of a commercial nature. Commercial activity (the bazaar) in pre-Soviet Uzbek urban areas was fundamental to the urban area's development. Ziyayev (1987) refers to the degree of commercial activity in Uzbek cities as 'pervasive'. To some degree all residents of urban areas in Uzbekistan (in the pre-Soviet era), in some capacity engaged in commercial activity of some kind (Ziyayev, 1987). As such, delegating commercial activity (trade, barter, etc.) as the primary function particular (or that best characterises the urban fabric in) to Uzbek cities, seems appropriate.

In the Soviet era, the third primary function is political or social administrative space. In characterising Soviet urban activity, far and away the most predominant component is social administration. Pugachenkova (1993) refers to the role of social ideology in political and administrative activity as dominating human behaviour and interaction. Administration and the Marxist socialist ideology that supported it, was a central feature not only in Soviet urban planning (Pugachenkova, 1993) but also a part of the daily lives of the people that suffered under the mountains of bureaucratic red tape (Pugachenkova, 1993). As such it seems apparent that introducing political/administrative artefact/space into the semiological study as something characteristic of urban Soviet primary function, is appropriate.

The third primary function of the post Soviet era characterises the post-modern, consumptive society. While one may easily identify many 'particular' artefacts of the post-modern city, and more to the point 'particular' activities, the level of post-modernity in Tashkent is at this point, limited. It has made its mark in the urban environment in its most basic forms. If one can qualify the post-modern city as a

collective artefact of a consumptive society, then artefacts that typify personal consumption would best suit this analysis as cultural meeting places.

Furthermore, in addition to the previous parameters that set up the definition of 'a cultural meeting place', it is additionally defined as an artefact or space (point in the physical urban plane) within the built urban landscape of Tashkent's city centre. This artefact is a place where communication between people occurs on either the ideological level or on the daily discursive level. As a semiological analysis privileges communication in various forms, it seems to make sense to conduct the analysis of urban form in places where communication and social congregation is paramount. The definition of cultural meeting place also necessitates a place where this communication either contributes internally to social discourse or influences externally the means of social discourse. Places that demonstrate an internally-based discourse influencing the development of culture may include such places as the bazaar, convenience store, movie theatre, public parks and squares. Places based in discourse that externally influences cultural development might include political spaces and buildings. While it may be argued that political discourse is based in internal social communication, in other words - the will of the social community, this should be qualified within the parameters of the case study. External influences should be understood as activities that occur within a select group of people (the politicians and decision-makers) and that influence the lives of others. While a democratic system of government can be understood as 'for' and 'of' the people, it nevertheless involves the separation of two groups (politicians and the populace) in the decision-making process. Though this distinction may be vague, political space and artefact will nevertheless be regarded as a cultural meeting place.

4.3 Research Methods

This portion of the thesis provides a detailed description of the three tactics used in the collection of data for this study. The three tactics include a cartographic analysis, a photographic analysis and a survey of architects and urban designers who live and work in Tashkent.

4.4.1 Cartography

The cartographic survey and following analysis contribute to this study as described above (see section 4.1.4). The actual mechanics of this tactic of data collection are herein described.

The cartographic survey reviews the two-dimensional organisation and ordering (i.e. plan views) of 'the study area'. In performing this task the investigator reviews two-dimensional representations (hitherto known as 'maps') of each chronological era (pre-Soviet, Soviet, post Soviet). In doing so the investigator endeavours to resolve a relationship(s) between the era (cultural and societal values that comprise that respective era and mode of production) and the two-dimensional ordering of space that is characteristic of that those values.

The maps are reviewed chronologically. That is to say, the maps of the pre-Soviet era (up to 1917), the Soviet era (1917 to 1991) and post Soviet era (after 1991), are reviewed for their spatial organisation in terms of a figure-ground relationship, and corresponding social plane (mode of production).

The understanding of the respective era's relationship to figure-ground is paramount, and is the basic thrust of this cartographic survey. The maps are reviewed in terms of their signification (both primary and secondary functions), and how this signification relates to the figure-ground relationship. While the study area adheres generally to the same parameters as used in the photographic analysis, in certain cases it is necessary to examine the 'points' (and their role in the figure-ground relationship) with respect to other points outside of the study area. In such cases reference to the 'city as a whole' or 'the city proper' includes other points within Tashkent that are either outside the study area or outside the centre portion of the city. As the city centre and the city proper are inherently linked, such references may be frequent. However, it must be stated that the focus of this cartographic study is the study area as previously defined.

4.4.2 Photography

The photographic survey and ensuing analysis contributes to this study as has been described above (see section 4.1.4). The actual mechanics of this tactic of data collection are herein described.

The photographic survey reviews artefacts and spaces within the study area that fall into the set of parameters that constitute cultural meeting place. Photographs of these artefacts are taken and the images

analysed for semiological content and cultural communication, with respect to the chronological period in which it was designed/built. The procedure of taking the photograph entailed: capturing images of the artefact as a whole; capturing images of specific superficial qualities (facades); and when possible this process included photographs taken when initially constructed and/or of the designer's drawings (elevations, sections, plans).

The photographing process endeavours to include as many images as needed to capture what the investigator feels is essential to the semiological analysis. However this process is regulated so as to avoid discrimination between artefacts photographed. Therefore a limit of six images per artefact was instituted. While the number may fall short of this limit, it never exceeds this limit.

The images are categorised into the following types: context, elevation and detail. Moreover the photographs will only include images of exterior features of the artefact. Interior images are not included in this survey. When information regarding the interior is pertinent, this is dealt with by means of the designer's drawings (section and plan).

4.4.2.1 The Points

The points or cultural meeting places that will provide material for the photographic (and cartographic) survey(s) have been predetermined based on the criteria set out in the section on cultural meeting places (see section 4.3). The points include examples (when possible) of each of the categories: living (residential), informal social gathering, and for each era one of the following: commercial, political and consumptive. The pre-selection of these artefacts was based on assigned primary function. That is to say, within the study area of this case, a clear and accessible example of each category has been selected. These examples have been chosen based on the aforementioned functional category and with respect to one of the three chronological periods that constitute the descriptive body of this case. These points include the following:

Pre-Soviet Points

The Bazaar – Selmash Bazaar

A traditional Uzbek urban artefact that has undergone tremendous change in terms of its role in the urban community and the way the community has readapted it (the bazaar) to better meet the social and cultural changes that have taken place in the past century and a half.

Residential Courtyard House

A traditional Uzbek urban artefact that also has undergone changes since Russian occupation of Central Asia. As one of the three staples that make up the traditional Uzbek city centre (the others being the bazaar and the Urda) (Pugachenkova, 1993), the courtyard house's survival and modifications for a changing social climate, are evidence of the importance of such an artefact - even in contemporary (Soviet and post Soviet) society.

Soviet Points

Revolution Square – Independence Square
Red Square – Amir Temur Park

As a fundamental artefact and primary contributor to the spatial organisation of Soviet Tashkent's urban environment, the Square visually exhibits the changes that have taken place and the layers of meaning which signify Tashkent. While these two squares are examples of informal social gathering areas, they have been constructed with great social meaning and as such were the primary instruments used in organising Tashkent's Soviet urban space and new city centre. The analysis of 'the Square' proves to be of particular importance.

Cabinet of Ministers Building
Ministry of Middle and Higher Education
National Library Navoi – former Upper Soviet
Selmash Factory
Palace of Culture

Soviet space is typically characterised by its political content (see section 4.3). While this generalisation can be extended to space that is not directly connected to political activity it most certainly can include urban artefacts such as buildings containing political offices. This is the case for the Cabinet of

Ministers Building, the Ministry of Middle and Higher Education, and the National Library (former Upper Soviet, currently housing various administrative councils and offices – see section 5.1). While all three buildings house political activity, with their primary function being the administration of social activity - as urban artefacts they are connotatively treated very differently. As political space and artefact played an instrumental role in the development of Tashkent's new (Soviet) city centre, these buildings are a part of the semiological analysis.

Additionally, both the Palace of Culture and 'the factory' are categorised as administrative space. More accurately this is defined as social administrative space. The factory is considered to be an essential component of Soviet ideology (see section 3.3.22). In terms of the moulding and shaping of social life and activity the factory seemed to be the perfect outlet or rather means of interaction between the growing industrial state and the populace. Along the same lines of social modification was the Palace of Culture (see Palace of Culture, Chapter 3). Here leisure activity was organised according to state ideology. Social behaviour that would otherwise be conducted or arranged by individuals (amongst themselves) was organised by state appointed social/leisure activity planners. As such, the Palace of Culture is most definitively a Cultural Meeting Place, and moreover one that exhibits a uniquely Soviet interpretation.

Soviet Housing (Apartment Complex)

While traditional (pre-Soviet) Uzbek residential development can be loosely characterised by the personalisation of space for individual use, Soviet residential development can be generalised as conforming to specific social and political ideals and values. This stark difference in approaches to creating personal living space and the importance living space plays in both pre-Soviet and post Soviet, requires this aspect of the urban fabric to be analysed. Furthermore, as Soviet residential space was imposed upon the Tashkent population, this type of urban artefact can contribute considerably to an understanding of foreign hegemony and how it is played out in creating urban space.

Post-Soviet Points

Mir Supermarket and Fast Food

As international co-operation in economic development increases, much of Tashkent's social plane is being altered. This alteration for the most part becomes apparent in the built environment (in terms

of urban artefacts) as services that have come to typify the North American (and to a lesser degree the western European) cityscape. Foremost among these artefacts is the fast food chain and convenience store. In Tashkent, Mir, a joint venture operation between Turkey and Uzbekistan, has spotted the cityscape with such stores. As this type of urban artefact is a product of a foreign social plane, or at the very least a modification of a function that does not resemble any existing artefact, it would seem necessary to enter this artefact into the semiological analysis.

Zarafshan Movie Theatre

While there is a precedent for this type of social gathering place under the Soviet urban experience, the Zarafshan Movie theatre and concert hall treats its secondary function in a very different way. This is to say, as an example of Soviet urban artefact that is experiencing change in terms of primary and secondary functions, the Zarafshan Movie Theatre is an excellent example

New Apartment Complexes

Contemporary living space in Tashkent has come to be an outlet for personal expression. With the changes in regulations governing personal living the personal residence (both existing and newly constructed) demonstrates how certain social freedoms can dramatically change the character of the urban fabric. As such a newly constructed apartment complex was part of the semiological analysis.

Summary

The analysis of these points is set up in a format that is conducive to visual association with written commentary. Each of the points will constitute a micro-section of the analysis. This micro-section is forshadowed by a general description of the artefact, its location, and year of design/construction. The role or function within the city centre (and the city at large) both in terms of primary and secondary function is explored and analysed. The artefacts' functions (primary and secondary) are discussed in terms of their respective chronology and in terms of their meaning in the current period.

4.4.3 Interviews

The interviews were conducted in such a manner as to familiarise the respondent with the area of study in order to keep the theme of the response consistent with other respondents. In order to familiarise the respondents an oral description of the central theme of the thesis was provided immediately prior to the conducting the interview. Additionally, images of particular spaces (maps and photos) and urban artefacts (photos) assisted in the line of questioning.

The interview itself consisted of two generalised open-ended questions regarding the central theme of the study. Additionally, the interviewer reserved a list of secondary, more specific questioning regarding the study. In the event that the respondent did not address all of the questions from the secondary list in his/her response to the generalised questions, the respondent was posed these secondary questions directly.

The interview session was recorded both by tape recorder as well as written notes. This was done to ensure the notation of a certain emphasis that may be placed visually, and which the audio recording would be unable to pick up, and to provide a transcription for accurate reference.

The interview was conducted with ten (10) urban designers and architects who currently practice in Tashkent. These respondents were chosen for their participation in the urban design process during the Soviet era and the new era of independence that has been ongoing since 1991. The stress was on an individual's history and methods in forming Tashkent's urban environment, though experience specifically in the study area was not necessary.

The two generalised, open-ended questions were:

With respect to Tashkent's city centre, describe the relationship between political independence (Mustaqillik) and urban form and spatial organisation.

What urban components within Tashkent's city centre do you associate with the following terms: 'Tashkent' 'Uzbek' 'Independence', 'The Soviet Period', 'The West', 'Traditional'

Before the interview process began the respondent was provided with a consent form outlining the future use of the material that s/he provided to the interviewer. His/her consent to use this material for the purposes of this study was consistent with the ethical review requirements of the University of Manitoba.

In the collection of the data and in the analysis of the material gained from the interviews, efforts were made to keep generalised responses down, and to favour more specific ones. Since the material covered in the questions, by its very nature virtually necessitates a generalised line of inquiry, little could be done in regard to the initial subjectivity of the responses. However, as the generalised questions were followed up with lines of inquiry that directly addressed specific issues and situations, it was noted that the responses became more objective (as initially expected).

This material contributes to this study in two ways. Firstly, it is an addition of untapped material to a body of work that is itself 'untapped' when considering the built environment as a physical expression of identity. Secondly the interview material contributes to the analysis of the literary material. An evaluation process arose from a comparison of the written work and the material gained from the interviews, and vice versa.

CHAPTER 5
ANALYSIS

1.1 The Findings

This portion of the study deals with the analysis of the material that was gathered under the guidelines of the Tactics section of this thesis. The analysis provides insight into the social and cultural meaning of respective artefacts and space that have been sampled as examples of each era.

5.1.1 Cartographic Analysis

Introduction

It was the initial intention of this portion of the data collection and analysis to bring together various sources of cartographic data and to analyse these two-dimensional representations of space in terms of their figure-ground relationships. In order to properly achieve this, it was hoped that the sources would be rich in various maps and other representations. However, as this portion of the study progressed, it became evident that there were certain restrictions on the availability of such sources thereby rendering the data collected in this portion of the study to be limited. The data that were gathered has been evaluated by this investigator as insufficient for a proper or more accurately an in-depth analysis of the three stages of urban figure-ground relationships. There is however enough data to provide a preliminary analysis, and more importantly, and in keeping with the theme of this study's intervention, there is the type of information that may provide an incentive for further investigation. As such the following analysis only introduces the material and the type of study that may follow, had the material been more effective. The interpretation and the results drawn from this material is therefore brief and the stress is placed on the linking of this material to the literature that was reviewed earlier that addresses the issues felt by this investigator to be pertinent to this type of analysis.

5.1.1.1 Pre-Soviet Mapping

The maps that are included in this portion of the study illustrate the plans of the city of Tashkent and its city centre before the Revolution. Of the two maps that are provided in this section, one of the maps includes a view of the layout of Tashkent before Russian interventions in the development of urban form and spatial ordering (colonisation) (see figure A). The other map illustrates Tashkent's city centre in plan after Russian colonisation (changes to the urban fabric), but before the Revolution and communism (see figure B).

The map (drawn in 1865) that illustrates Tashkent before colonisation (figure A) is rather simplistic in terms of its representation. It shows Tashkent in terms of its primary urban elements. Present are the shakhristan, a rather elaborate bazaar area, and the Urda. While the map itself is rather primitive (without detailing nor a strict adherence to scale or accuracy on a smaller scale, i.e. roads and borders) the map nevertheless clearly describes the organisational pattern that was present at the time in a very definable way. The bazaar, shakhristan, the Hasti Imam and the Urda are all located in close proximity and mark the city centre. If the bazaar is recognised as the geographic and cultural centre of the urban space, then it can be easily interpreted that the remainder of the city seems to branch out from this area. In occupying a central area such as this, the layout of the urban core (and the remainder of the city for that matter) can be attributed as having a very definable meaning. As this type of organisation is a continuation from a much earlier period, Lagopoulos (1986) might classify this type of organisation as adhering to the feudalist model of production. In the feudalist modes of production urban settlement is seen as regressing back to ideals of cosmology and religion that were present in the communal and Asiatic modes of production, both stages of earlier development.

Pre-colonial Tashkent cannot be described as adhering to an Asiatic mode of production simply because the role of a monarchy or royal figure did not play as large a role in the development of connotative urban spatial codes as was typically associated with this mode. While it can most definitely be described as "communal" in terms of its mode of production, Lagopoulos (1986) contends that all urban space has attributes of this mode and moreover it is common to all urban settlement. As such the connotative codes, both religious and cosmological play a key role in the development of spatial organisation. This would seem to be the case in Tashkent. The interpretation of the place of humankind in

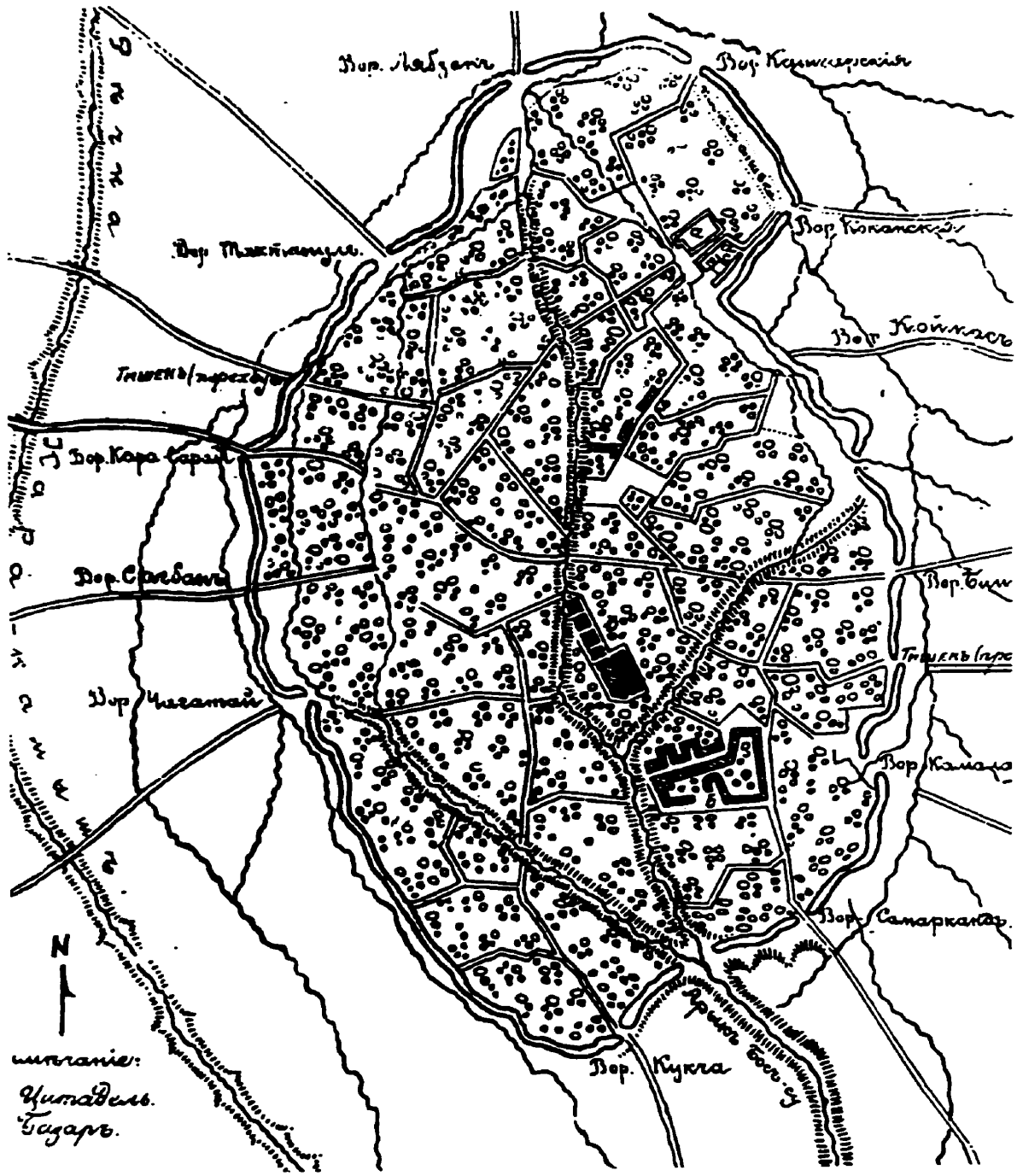


Figure A. Plan of Pre-Colonial Tashkent (cc. 1830)

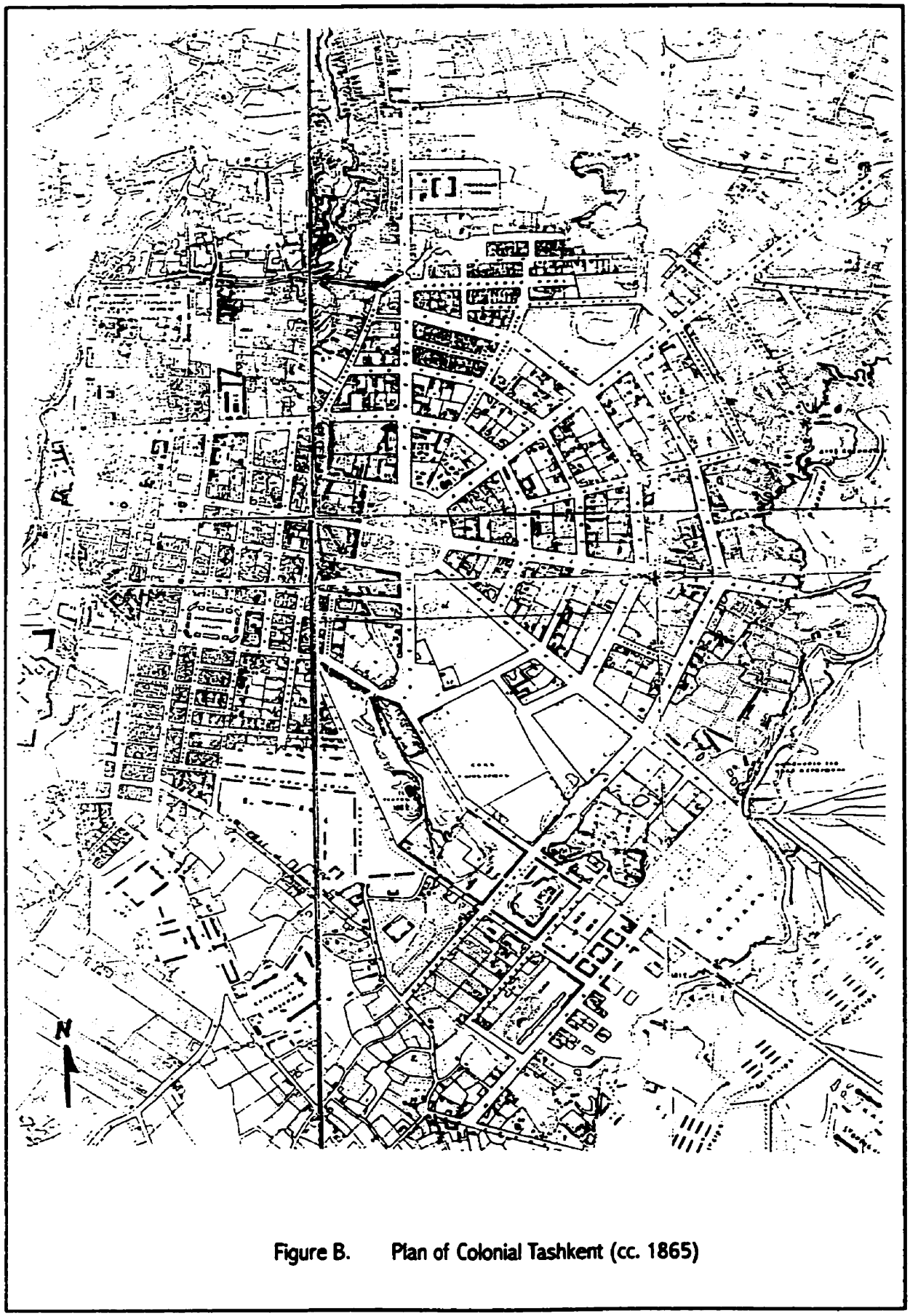


Figure B. Plan of Colonial Tashkent (cc. 1865)

the universe, along the mythological plane is seen as privileging people and social activity as the gifts from other celestial deities. As such the bazaar, the incarnation of social activity would rightfully occupy the role of the central artefact in this urban space. Beyond this however it is possible to propose an alternative interpretation. While Lagopoulos (1986) contends that the Antique mode of production was exclusively a phenomenon unique to two cultures (Ancient Greece and Rome), it is possible to challenge this notion with the case of Tashkent and other Uzbek urban centres. While the role of religious and cosmological connotative codes is clearly present in the pre-colonial Tashkent urban order, it is also possible to interpret the functioning and early 19th century social meaning as perhaps being something other than feudal, and perhaps even Antique.

The Antique mode of production was characterised by the same religious and cosmological codes as are present in the communal and Asiatic (therefore feudal) modes of production, but the functioning of the space and therefore the new meaning of the space came to be very different. The difference resulted from the primacy placed on rationalism and the emergence of scientific thought. The Greeks and the Romans regarded the city centre as a common place of economic, civic and political activity. With this role and the philosophy of rationalism behind this mode of production the city centre came to mean something other than the centre of social activity as a connotation for the centre or unity of the universe. The circular arrangement of the urban area around this centre was planned to read as places that were meant to be equidistant and commonly accessible by all. It is in this respect that the Uzbek city centre may also be analysed. While Tashkent's pre-colonial city centre was established under a feudalist mode of production, (connoting) reflecting the ideas and values of the populace as they were tied to religion and cosmological beliefs, the function of the city centre with the placement of the multipurpose bazaar at its core, came to function in much the same terms as the Antique city centre. The bazaar was a common economic, social, civic and political space and artefact for all members of the city. As such its location at the centre (a space that is theoretically accessible equally by all) can in fact be interpreted as an application of rational thought. While Lagopoulos makes the distinction between feudal and Antique in terms of the centre's specific function, it (Tashkent) nevertheless arguably expresses an analogic code that that is more Antique than feudal. Lagopoulos defines the Antique mode of production as veering away from barter (present in Tashkent) in favour of manufacturing and processing. While this is not the case in Tashkent (though some

manufacturing was present in the form of shoemakers and bakers etc.) the Tashkent model may arguably more appropriately fit into this (Antique) model simply in terms of its location as a primary function.

The post colonisation map illustrates the city centre with much more detail. More importantly this map illustrates the 'new' city centre as established by the Russian colonists (see figure B). While a clearly represented city centre is present, the geography, location and resultant social meaning dramatically differ from the traditional Uzbek city centre. The development of this type of urban centre is representative of the social and economic changes that were occurring in the region as a result of colonisation. Efforts were being made to increase functionality and efficiency in the urban environments. Streets and transportation ways were widened and reconstructed to be more suitable for heavier traffic flow. Further, the organisation of the new city centre meant the introduction of land-use planning and zoning - also to increase efficiency and functionality. The organisation of the city centre can be easily read as similar to the radiant city. While the primacy of the "city centre" remained, the function of this space and therefore the resultant meaning was dramatically different from the Uzbek centre.

This type of spatial organisation is what Lagopoulos would likely refer to as resulting from an industrial mode of production. The industrial mode of production is characterised by a shift from the ideological plane to scientific theories. More accurately the type of spatial organisation that is present in the example of Tashkent may be qualified as within the progressivist model of the industrial mode of production. This model is typically characterised by a primacy of functionalism, efficiency and productivity. While this is the case in the colonial Tashkent model, the production of urban space can be analysed with some greater detail. The map illustrates a city centre and organisation that is typical of the radiant city typology. The radiant city, the compartmentalisation of functions, the segregation of space, and the single-purposed value of the controlling social forces all contribute to reading this space as part of the machine aesthetic. The map clearly demonstrates the contrast that had occurred in the urban fabric after colonisation. The eastern half of the city centre shows one third of the radiant wheel that extends out from the centre to the rest of that portion of the city. The western half of the city displays a spatial organisation that is dramatically different, particularly in the north west corner of the map, where remnants of the 'old city' remain.

More than simply being different in its social goals and the privileging of certain values, the new scheme for the city centre contains meaning that is markedly different for those who had lived within the old Uzbek urban fabric, i.e. the meaning of the city centre as a cultural artefact of Tashkent's peoples had been modified by a foreign hegemonic culture. The treatment of the urban fabric as a medium whereby to increase functionality and productivity, while typical of an industrial era development, is nevertheless in direct contrast to the Uzbek Antique mode of production. The Uzbek centre housed a particular function. This function was critical to social and cultural interaction and therefore it was privileged in its centrality. The new city centre has replaced this function with another. Here, a botanical garden and leisure area occupies the centre. This has remained the primary function of this location throughout the colonial, Soviet and present eras. The function such an area affords for the general populace of an industrialising culture is typically understood as an improvement in health and well being. While this sort of urban development had been popular in western European nations (for example, England) and the United States of America, the precedent of a 'green' area within an urban fabric carries with it a very different meaning for eastern nations. Russian colonialism regarded such green space as little more than yet another cog in the machine towards the improvement of functionality and efficiency of the urban environment. The value that green space and particularly water (in the form of fountains) held for Tashkent, an Islamic urban culture, is much beyond mere primary function. The connotative meanings of such space holds critical social meaning and is representative of some of the key values of Islamic culture. Water and greenery are of course rather sparse natural elements in cultures of arid regions. Generally, such space, at least in terms of being highly articulated with fountains and a strong geometry present in the plantings, was reserved for social groupings of some social status. This is not to say that the Russian colonial use of such space as a purely primary function is in disjunction with the tenets of Tashkent culture, but there seems to be a lack of understanding of the public and private space involved in the use of such natural elements. While the Islamic garden was not exclusively a private artefact, the typical understanding of this space was meant to reflect privilege or a higher status. Thus the use of such elements was generally reserved for private spaces or spaces deemed to have spiritual or religious importance. The colonial use of such elements in a purely public area can be taken as being somewhat out of context and therefore perhaps less understandable to the general readers of the space. It does however retain a place of prestige, the city centre. As such, despite that place being in the

public domain, the botanical garden in the colonial city centre provides somewhat of a transition from one type of urban meaning to another.

5.1.1.2 Soviet Mapping

There are three maps that are used in this portion of the study that constitute the Soviet cartography of Tashkent (see figures C, D, E). The first map offers the overall 1930s reconstruction of the entire city of Tashkent (see figure C). This for the most part was the area deemed to be 'new' Tashkent, and a small portion across the Anhor Canal in the older portion of the city. Perhaps the most striking difference present in this view of the city is the changes made to the organisation of streets, and thereby the placement of certain artefacts.

The grid, a feature typical of Western urban fabrics, seems to be the overwhelming ordering principle present in this view. The grid carries with it a number of issues that should be addressed. The grid is more than just a very formal manner of ordering space; it carries with it meaning that speaks volumes of the cultures that employ this mode of spatial ordering. The grid is a means of control. Space or the void is typically understood by Western cultures as chaotic, in the sense that it is an artefact without order. For a Western culture, to enable the use and proper functioning of a space, the space must be ordered. It is commonly understood that 'disorder' or more accurately what is perceived as disorder hinders function. The grid offers a formal ordering of space that is more than just functionally efficient, it adheres to scientific theories and a rationale that is perceived as larger (in terms of cultural values) than specific ideologies. This again is very much like the colonial understanding of spatial production and its role within the industrial mode of production. For these industrial cultures, science and rationale are privileged. It may in fact be argued that the role that they fill is the void created by the dissolution of faith in things that were considered cosmological or religious. The pre-colonial Uzbek city ordered itself in concentric circles with the heart of the urban fabric being the major point of social interaction and communication. This ordering reflected the Uzbek understanding of humankind's placement within a cosmological plane. The colonial and Soviet urban fabric is ordered within the confines of a grid. Spaces and artefacts are segregated and functionality (movement, access to an from these points) is made more efficient with the aid of this grid.

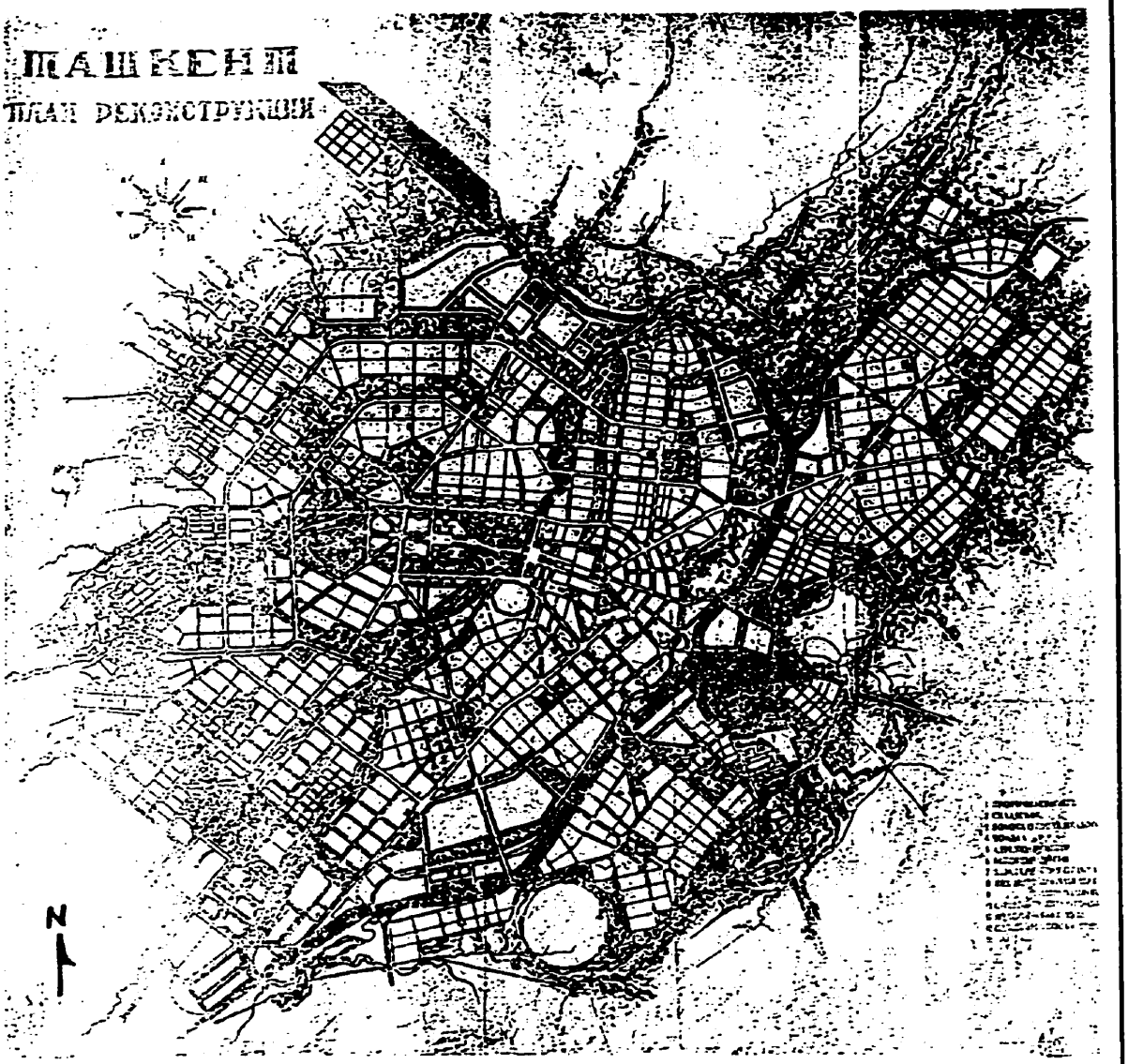


Figure C. Plan of Soviet Tashkent (1933)

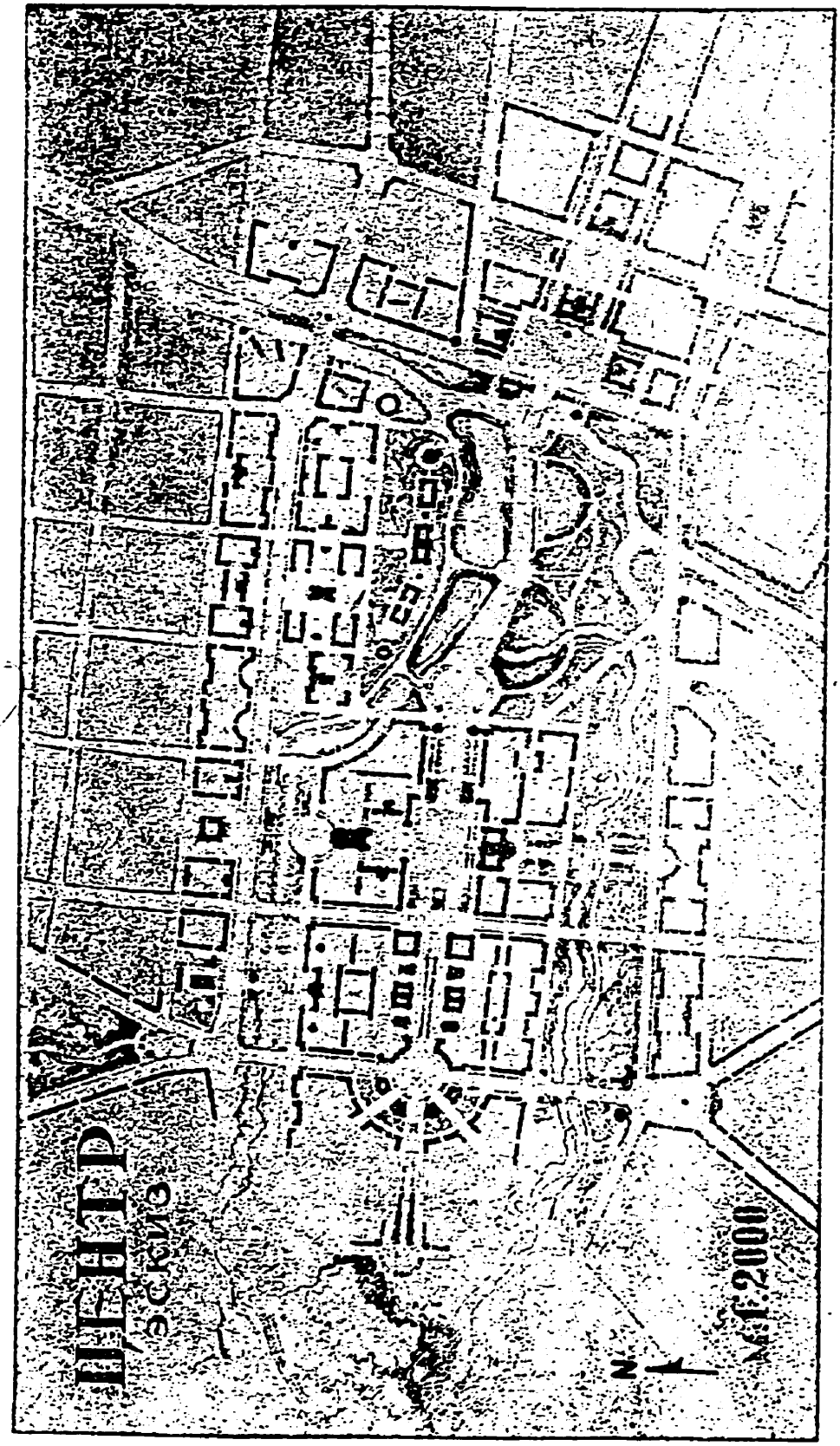


Figure D. Plan of Soviet Tashkent - City Centre (1933)

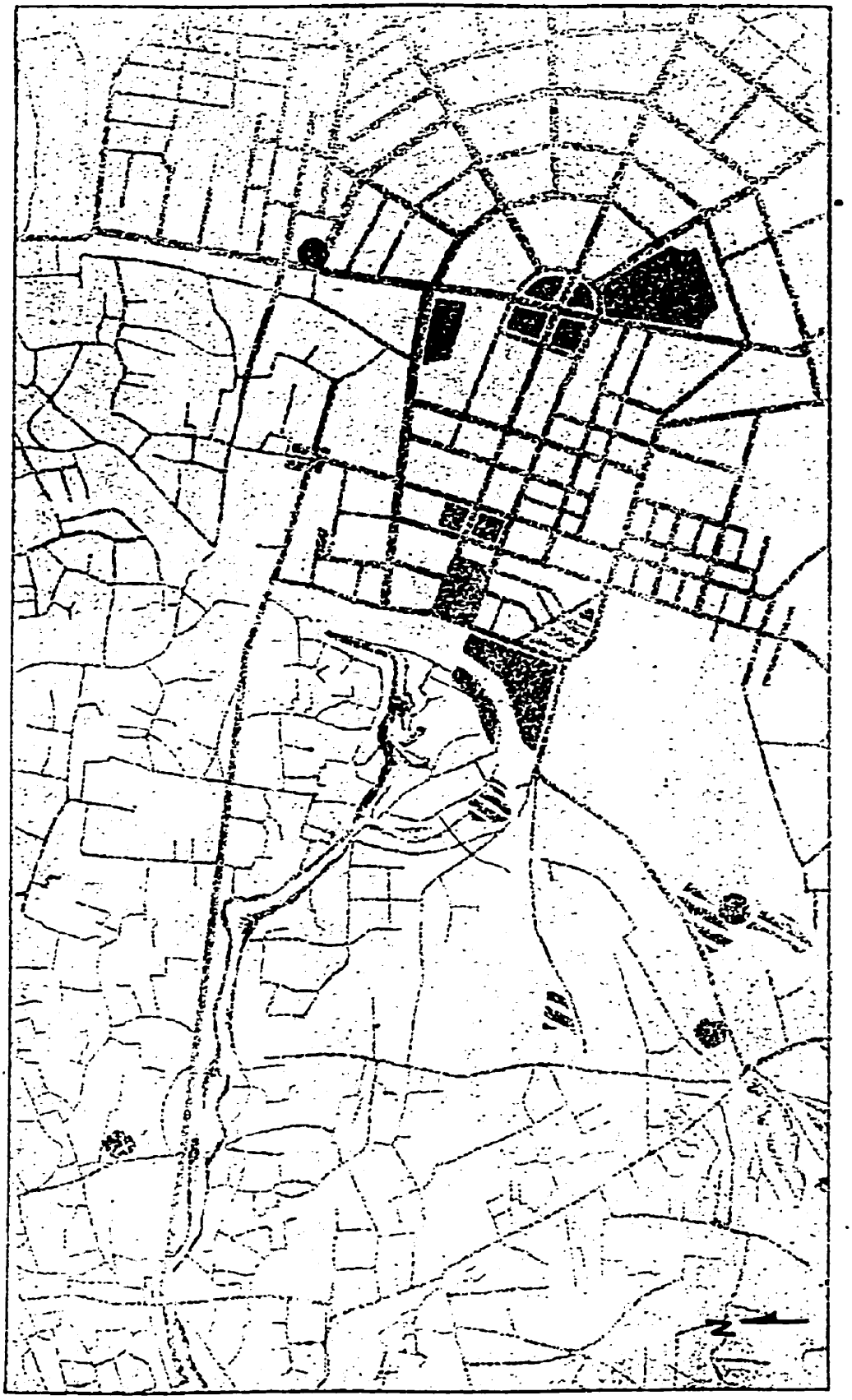


Figure E. Plan of Soviet Tashkent - City Centre (1933)

The grid represents that culture's belief in science and reason, and more importantly a break with the cosmological plane.

While a figure-ground representation is not present in these maps, both the overall plan of Tashkent and the two more detailed plans (see figures D, E) of the city centre can contribute to a further understanding of the grid, particularly in comparison to the Uzbek understanding of solid and void.

As mentioned in the literature review, the Uzbek understanding of figure-ground is unique in terms of the idea of the city centre, and more importantly opposed to that of the Soviet (and for that matter the colonial) understanding of space. While the Uzbek city centre is typically characterised by an increasing density in built form and a dissolution and devaluing of open space, the Soviet city centre does not respect this and even contradicts this. The traditional Uzbek understanding of artefact and void privileges or applies a greater value to built form over space. The city centre demonstrates this with its increasing density. The increasing density can either be looked at as an increase in built form or else as diminishing open space. Roads and other means of access and spaces between buildings and so forth all decreased in scale and volume in the Uzbek centre. The Soviet city centre on the other hand is characterised, at least in this case, with a grand open space and an almost even distribution of built form regulated by the grid.

These different interpretations of space can be analysed in terms of their connotative meaning. It is possible to attribute certain connotative qualities to the Soviet city centre by contrasting them with the Uzbek centre. The Uzbek centre is marked by human activity (in the form of a bazaar), and by a high density of built form. These two urban elements perhaps connote the elevated role that the human or social component plays in Uzbek urban culture. The Soviet centre on the other hand is marked by an evenly distributed density of built form regulated by function and a centre that is an open space. This would seem to connote a primacy of reason and a devaluation of individuality. The two cultures seem to recognise space or the void in similar ways, in that space is something to be controlled. But these views seem to diverge when value is attributed to space. Space, while valued enough to hold the role of centre for the Soviets, is nevertheless treated as something that is free and less formal when in its own right. The central open space of the Soviet city is only minimally free as it has been assigned the function of 'park' or 'garden' to thereby contribute to the mental and physical health of city dwellers. This type of attitude

toward the void reflects the culture's thoughts about its position within the global plane. This culture may arguably understand itself as a hegemonic force, separate from other aspects within the plane. While pre-colonial Uzbek culture may produce built artefacts that invade space, their recognition of space is subtly different. Space is devalued. It is not recognised as something that needs to be controlled in order to function. Rather it is almost non-existent. Space is not recognised therefore as a separate entity, but a place of continuation of built form.

5.1.1.3 Post Soviet Mapping

The post Soviet map is unique in terms of its presentation (see figure F). The map is atypical when comparing the purpose of the maps to the others in this study. The other maps in this section of the study are either historical or else were used in the presentation of a new reconstruction (functional) of the city. The map that is presented in this portion of the study as the post Soviet map is one that is used by the tourist industry for newcomers to the city. The map demonstrates that its primary function is to help tourists orient themselves to certain locations within the city. As a result the map of the city highlights particular artefacts and functions within the city that the tourist industry, and theoretically the culture as a whole, feels to be important 'places' within the urban fabric.

The fact that this map identifies 'points' within the fabric of Tashkent, and not the city (as a whole) or even regions of the city as places of interest, is indicative of the new form that post-Soviet Tashkent is taking. While comparatively little has changed in Tashkent's plan (two dimensionally) when looking at the changes occurring in the appearance (three dimensionally) of the city centre, nevertheless changes are occurring that may lead to significant changes in the future. For the most part these changes are resulting from the increasing influence of foreign, particularly Western and European, ideals and social concerns. While this is certainly made evident in the built artefacts of Tashkent's city centre (see photographic analysis), the changes are somewhat more subtle in the plan of the city, and more to the point in the changing relationship between space and void. Though subtle the changes should nevertheless be regarded with some degree of gravity as this is only the initial stage of independence, and a time to regard these subtle changes as the roots for likely future problems.

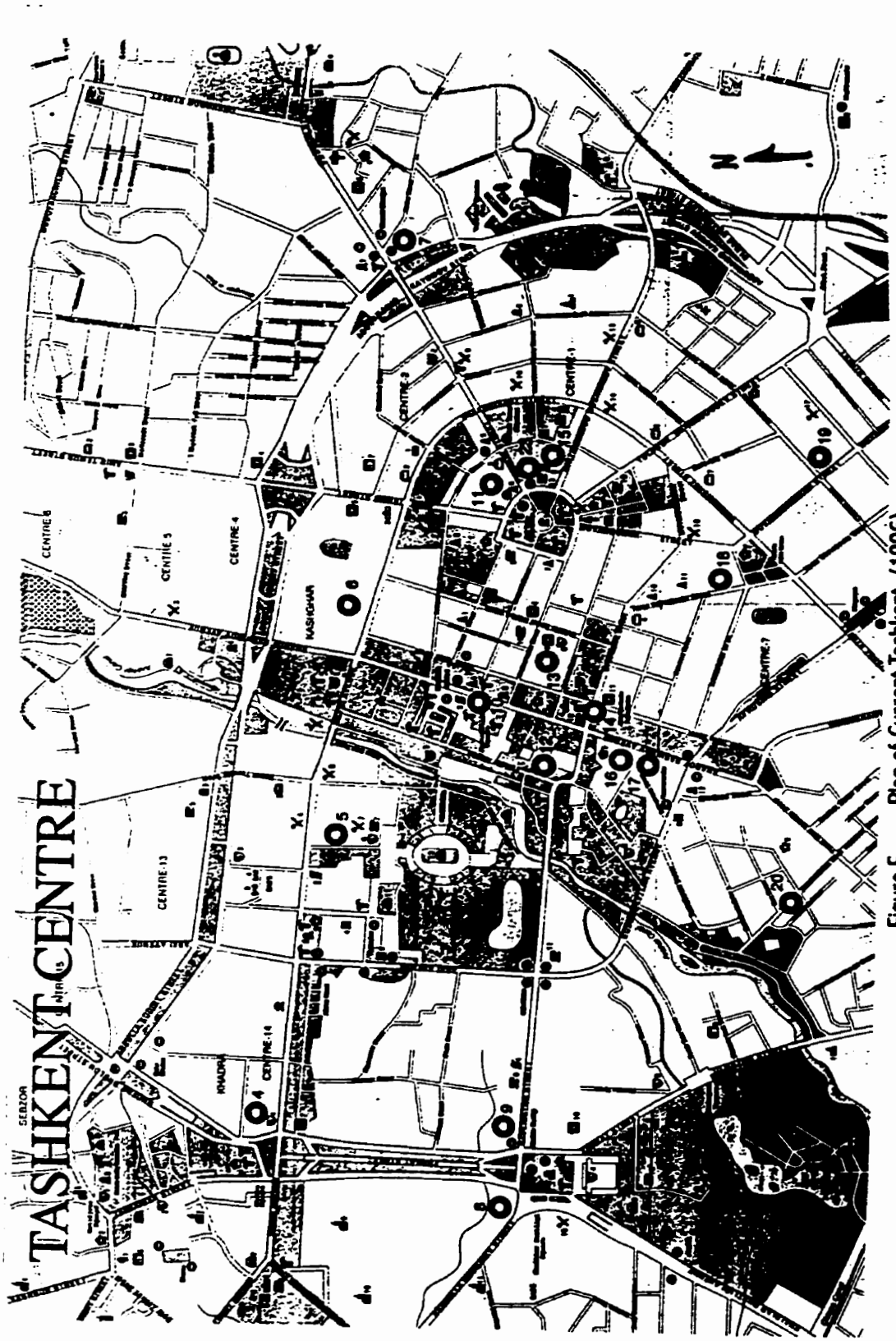


Figure F. Plan of Current Tashkent (1996)

The map identifies a number of points in the city centre that are deemed of key importance to those visiting the city. As such it can be understood that these points characterise the identity of the city. The points are urban artefacts that range from historic landmarks from both the pre-colonial, colonial and Soviet periods. Additionally the points include contemporary artefacts such as western style hotels and restaurants. The location of these points (with respect to another or with the existing plan of the city) seems to be irrespective of the context within which it exists. As such it may be said that the spatial ordering of both the new and the existing artefact does not follow a recognisable pattern. It does seem that the ordering of these points could be classified as chaotic; however, this does not seem to be of particular importance as the placement of points does not seem to hold the rank of points around which or in reference to which a new order of urban fabric will develop.

Additional commentary in this portion of the study is left for future empirical research. The gathering of data for this portion of the cartographic analysis had proven to be particularly troublesome. At the time of this study, the dilemma that the state of Uzbekistan faces regarding national security and acts of violence against the state provided an atmosphere that was - to say the least - not conducive to the gathering of material that was felt to compromise the nation's security. As a result, the general plan of the city, that which contains the cartographic details necessary to carry out this portion of the analysis was not available, nor were maps of the study area of this study. As the study area included a site that was subject to terrorist activity in 1999, maps and plans of this area were withheld from use in this study. As such this piece of the study will remain open for further study, pending the availability of the necessary material.

5.1.2 Photographic Analysis

This portion of the analysis covers the material gathered in the photographic survey. The images taken include all of the points or cultural meeting places that were deemed examples of cultural transition and therefore demonstrate (when collectively reviewed) the changing identity of Tashkent's urban culture. Thirteen urban artefacts are reviewed, a background to the artefact, the primary and secondary functions are presented and analysed, and then conclusions are presented.

5.1.2.1 Selmash Bazaar

(Figures: 22-27)

Introduction

The Selmash bazaar was constructed in 1992, directly after the nation received its independence from the Soviet Union. The Uzbek bazaar, and in particular the Selmash bazaar is an excellent example of transitional space. While the primary function associated with the bazaar itself is a uniquely Uzbek cultural product the variations on the connotative signs associated with the secondary function of the Uzbek bazaar can be perhaps characterised as less straightforward. That is to say, the Uzbek bazaar has come to serve fundamentally the same primary function in contemporary society as it did when it was originally conceived. But at the same time the 'bazaar' as urban artefact has come to be communicated in a number of different ways. The Selmash bazaar is an example of this type of connotative reinvention.

Primary Function

The primary function of the Uzbek bazaar was multipurposed. It served as both an informal social gathering place, a place of commercial exchange, a place of cultural and social interaction and exchange, and a place that provided the essential service of food provision. This was the primary function for the bazaar when it was conceived originally. Today, and during the Soviet era the bazaar functions in much the same way. The minor variations began to develop in the Soviet era. During this time the emphasis placed on the mass production of agricultural commodities was high, and as a result the food provision, in terms of selection and quality, rose. As well, during the Soviet era, the bazaar became a state-operated venture. It was no longer in the hands of the individual entrepreneurs. This meant two things for the development of the bazaar. Firstly the bazaar's food provision, time of operation, and spatial organisation came to be moderately controlled by the state. The stalls in which the individuals or families operated were no longer organised in what the Russian colonists at the end of the 19th century referred to as 'chaotic'. Rather the spatial organisation began to be modified as to provide an environment that was more functionally operable, and more 'appropriate' for a modernised society (see figure 24). Secondly, governmental intervention meant that the placement of the bazaar was also to be regulated. In pre-colonial Tashkent the bazaar was a centrally located artefact that served as both a place for social and commercial

Figure 22. Selmash Bazaar - Entrance

Figure 23. Selmash Bazaar - side view

Figure 24. Selmash Bazaar - Aisle

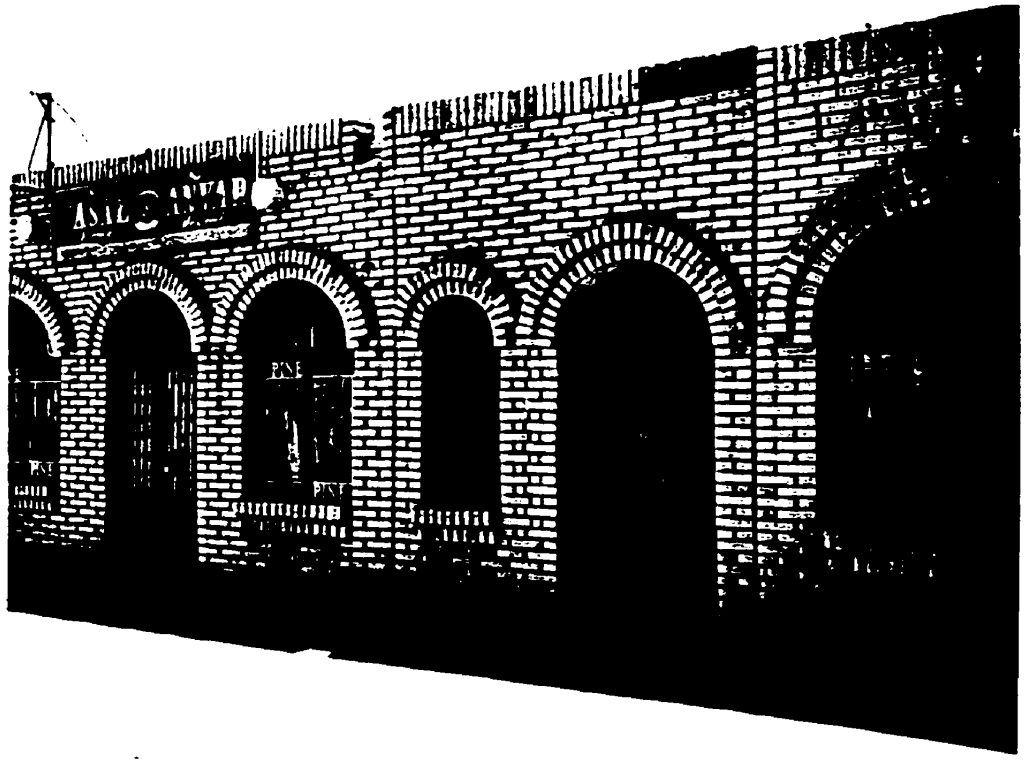


Figure 25. Selmash Bazaar - peripheral stores and shops

Figure 26. Selmash Bazaar - Functional Elements of the Roof

Figure 27. Selmash Bazaar - Functional Elements of the Roof

exchange, but also as a marker for the city centre and consequently as a point of organisation. Under the Soviets the location of the bazaar was regulated and determined based on social requirement. Points in the new half of the city were determined based on population density and zoning type to allocate a specific space for the bazaar or not.

Selmash bazaar, though built in 1992, still followed this type of rational location and design. The area of Selmash, at the end of Hamza Street is essentially one of the newest parts of the city. The fact that the bazaar is located in this area at all is an indication that the service that the bazaar provides (food provision) was needed for the general public around this area. Selmash bazaar is typical of most bazaars in Tashkent in terms of food provision, formal layout and means of operation. While it has been noted that the bazaar has essentially retained the same primary function that it had initially there have been certain subtle modifications that should be noted. More to the point such modifications are typical of bazaars of a smaller scale and are not generally associated with a chronological period.

The Selmash bazaar is of a smaller scale than most major bazaars in Tashkent. As such the major modification of primary function has come to be in the degree of social interaction that occurs in the bazaar space. While the larger bazaars still retain the lively social interaction between buyers and sellers, the smaller bazaars, such as Selmash do not provide an opportunity for such interaction. Consequently the role of the smaller bazaar has comparatively changed a from place of social and commercial interaction to a place of primarily commercial interaction.

Secondary Function

The spatial organisation of the bazaar can best be described as modified. The bazaar that exists today, whether small or large essential follows the same pattern of commercial stall, pedestrian walkway in front on the stall, and the repetition of such space, all of which is under a canopy of roofing of some kind. Traditionally the bazaar was a space that could be described as monumental in size and scale. The roofing generally followed a repetition of cupolas or domes, and when observed from an elevated area, the bazaar space seemed to be covered by a light blue, undulating surface resembling something like that of ripples on the water. Traditionally the layout was somewhat more elaborate than what is presented today. While the functional units (the stalls) were fundamentally the same as their contemporary counterparts, the

organisation of the stalls was much more elaborate, and often followed highly complex canonic/geometric patterns, which could quite easily give the appearance of chaotic space (so thought the Russian colonials).

The Selmash bazaar does not connote with the same sort of elaborate signifiers. Instead, like most bazaars in Tashkent (large and small) the layout follows the Soviet rationale of the grid pattern. Aisles and stalls are organised in terms of straight lines and 90-degree angles. The roofing while elaborated in terms of the tension and suspension bands that support the schiffered metal canopy does not follow the same geometric ordering that it did in traditional bazaar roofing. Perhaps the most striking component of the Soviet or even contemporary bazaar is the way in which it evolves. The bazaar seems to be a living thing. While grids and aisles are set out according to Western ideals, the activity and social behaviour that occurs in this space is very Uzbek. Space is understood, or so it would seem in a very different manner. The material object –open space relationship that exists in the formal plans of the bazaar's layout does not seem to influence the Uzbek understanding of the space. Consequently the aisles of the Selmash bazaar are often treated as alternative spaces to set up temporary stalls or to stack certain produce.

The Selmash bazaar has retained some of its colonial qualities as well. The area of the bazaar proper is bounded by two strips of small stores and shops that run along both sides of the produce section. While these shops retain some of the pre-Revolutionary character of the bazaar the primary function has certainly been updated. Rather than providing a service such as shoemaker, or loan office (typical of the type that was present in the colonial era) these shops generally provide the sale of western goods (audiotapes, imported produce and foodstuffs) and services (movie rentals, hair salons and so forth). This may be regarded in two ways. Firstly the idea that these shops are now providing contemporary versions of 'needed services' that are appropriate to locate adjacent to the bazaar is completely understandable. As culture and social needs change the urban environment changes to meet those needs. Alternatively, the dominance of Western style service in these shops can be likened to a continuation of the colonial system. Originally the advent of constructing alternative Western-style services around the bazaar was a Russian colonial idea, generated to fulfil the cultural and social needs of the Russian portion of the population. By advancing this idea to a contemporary context, the peripheral shops continue to emphasise the presence of Western cultural values, but rather than Russian colonial needs, the presence of post-Soviet and arguably, Westernised or even Americanised cultural values seem to be the major influence.

As such, the Selmash bazaar can be described in the following way. It is a space that is constructed from materials typical of the industrial period of the Soviet era housing a primary function typical of pre-colonial Uzbek culture, physically surrounded by shops providing Western goods and services in a Western style, and the overall structure has been located in a space that can either be regarded as Soviet, in terms of its rationale, or post-modern North American, in terms of locating a convenience service such as this in a primarily residential area. This being the case, the overall physical structure of the bazaar must be examined in terms of its connotative qualities to determine if there is in fact a harmony between those connotations and the ones already mentioned.

The structure, though built only eight years ago, is showing signs of decay. The roof is little more than a schiffered tin canopy to shield the users of the space from the sun and the rain (see figures 26 and 27). What little articulation there is in the roof is located directly over the entryway. Here the roof makes a rounded jog upward drawing attention to the fact that the main portal is located there. The materials used are of some note. Schiffered tin (for the roof and some siding) and baked clay bricks (for the shops around the periphery) are the same materials that were used in the 1920s when individual home owners remodelled their courtyard houses. One may make the association between these two artefacts (the post-Soviet bazaar and the Soviet era courtyard house) through these materials. Or, more accurately, one may suggest that a primary means of expressing individuality is through the use of materials that allow for a flexibility of spatial articulation. This would seem to be the case for these materials.

Conclusions

While the bazaar seems to be one of the few existing artefacts (in terms of primary function) that may be qualified as an Uzbek urban artefact, there are a number of issues involved in the bazaar that make this issue much more complex than it may initially seem. The bazaar seems to be the urban artefact that exists on all three planes that are under scrutiny in this analysis. In terms of primary function, it is Uzbek in nature, modified by colonial and Soviet social values, and operating with post-Soviet goods and services. Connotatively it is Soviet in terms of rational service to the community and building materials, while simultaneously connoting the colonial and to a smaller degree pre-colonial bazaar with its layout. In terms of its location it may be viewed as post-modern (in the North American sense).

5.1.2.2 The Courtyard House

(Figures 28-31)

Introduction

This residential courtyard house is located on Gulom Street, approximately 100 meters from Hamza Street. The house, typical of pre-Revolutionary Russian colonial housing in Central Asia exhibits a number of interesting features in terms of both its primary function and secondary function.

The house, built approximately 115 years ago (circa 1885), demonstrates both the Uzbek traditional housing pattern, as well as modifications made by colonial cultural preferences. The analysis of this artefact can be therefore broken up into two portions, the first being the initial artefact - that which can be qualified as traditionally Uzbek, and secondly, the modifications or transitions that occurred, the result is a hybrid of Russian and Uzbek social/cultural values demonstrated in the built environment.

Primary Function

This courtyard house currently demonstrates the initial primary function that was used in the design of this space. The occupants, while Russian, inhabit the space in much the same way as was initially intended by the design and organisation of the built space. In this respect the modification of the space can be seen as reciprocating, i.e. that the current occupants have adapted the traditional Uzbek pattern of living and of occupying living space.

The current occupants use the courtyard as a preparation area for producing honey (for sale at the market). All of the traditional elements of the space are present, and used on a daily basis. As the construction of this colonial home was directly under a Russian influence, or rather a Russian interpretation of Central Asian domestic life, a home, such as this, was not designed to be occupied by Uzbeks. The cost of material (at the time of construction), fenestration and location of the home are indicators that this house was designed for a Russian family. In fact this home is currently occupied by relatives of the people initially responsible for the construction of the home, 115 years ago. Nevertheless the house functions in much the same way as a purely Uzbek house would in terms of activity and lifestyle.

The dining area (aiwan), in the open-air courtyard is currently used both as a dining area and as summer sleeping quarters. The ichkari and the tashkari have not maintained the same function as they do in an Uzbek home. The two divisions of space while originally intended to separate the sexes when visitors were present have come to mean a simple division of space. Along the same lines, the mehmonhona or guest section of the house, has come to function as a place of storage and not as a place for relatives and friends to stay when visiting.

Secondary Function

The Uzbek courtyard house traditionally refrains from open portals onto the streetscape. As a result windows and open-doorways are not typically present. In this example however both of these elements (fenestration and open portals) are present. This is a result of the modifications that were felt necessary to reflect the cultural preferences of the colonists. While the foundational artefact (the courtyard house) is an Uzbek cultural signifier, the occupants and as a result, the built form within the space, have been treated (modified) to connote colonial cultural values. Windows approximately one and a half metres high and a metre wide number seven across the front façade alone. Around the windows is a trimming, that both in contrast (colour) and articulation (descending rectangular forms creating a concave effect) emphasise the importance of what lies inside the home, and more importantly the value of visually sharing that importance with people of the street.

While the traditional Uzbek courtyard house is accessed by a gate (which can be articulated in terms of very elaborate geometric design and large scale) the modified Russian version demonstrates an entrance that is arguably rather discrete. While centrally located, the rhythm created along the façade by the repetition similar windows downplays the importance of the main portal. A canopy over the main entrance is present but does not strongly (visually or functionally) connote an importance (or hierarchy) to the act of entry. The presence of pilasters on each side of the doorway does however subtly break the rhythm of

Figure 28. Residential Courtyrad House

Figure 29. Residential Courtyard House - articulation of windows

Figure 30. Residential Courtyard House - Entrance Gate

Figure 31. Residential Courtyrard House - Doorway Entrance (colonial modification)

the front façade. Additionally the presence of pilasters, though small in scale and by definition nearly flush with the exterior wall, does allocate a European expression of importance or prestige to the entry portal.

The organisation of the space and the built form of this artefact are also felt in terms of its two-dimensional expression of space, the plan. More to the point, the plan, while adhering to an organisation that originally functioned to meet certain cultural and social values and needs, does not in this case connote the signifieds as they may have been originally. The central courtyard, of the traditional Uzbek house, functioned as the hearth for the family. It was a central meeting place for the family, a place to work (on textiles and market goods), and often a place to plant a garden. The open–air courtyard in this regard was of high importance to the familial social network. Moreover, the fact that this physical space was located centrally, with all lesser functions (kitchen, toilets, bedrooms, etc.) in an outer layer surrounding this space, can also be read as a connotative act, attributing a hierarchy to the importance of collective or familial functions. Further, this centrally located space is open to the sky. One may easily make the connection between offering certain cultural (social, familial or otherwise) acts to a space as connoting ascendancy to the non-earthly.

This Russian-modified version of the courtyard house, while functioning (for all intents and purposes) in a very similar way does not seem to attribute the same cultural hierarchy to the central space. This at least seems to be the case in this example, as demonstrated by the enclosure of the courtyard space. The internal, central space no longer is connected to nature or the sky above as a temporal roofing system has been developed to cover the space in the winter months.

Conclusions

The residential courtyard house is an example of an artefact that demonstrates a transition of cultural values. As an artefact of Uzbek culture that was from the beginning meant to cater to the cultural needs of a Russian family, the courtyard house functions primarily and secondarily in a manner exhibiting qualities of a hybrid. The courtyard does not signify in the same way 'the hearth', nor the hierarchy of the individual living spaces adjacent to the courtyard. Additionally the front façade of the house, while subtly articulated does not signify the modesty and sanctity of personal living space typically associated with the Uzbek courtyard house. In sum this urban artefact, when viewed in its entirety connotes a transitional

culture embodied in a hybrid artefact. Together culture and space here signify a signified that officially is not recognised. In terms of purity this artefact is neither Russian nor Uzbek.

5.1.2.3 Amir Timur Public Garden

(Figures 32-38)

Introduction

Generally considered to be the geographic and social centre of the city, Amir Timur Public Garden has since its construction in the early 1920s, under Soviet rule undergone a number of changes - particularly in terms of the signifier and the signified. The square has seen many changes each reflecting the ideology of a particular era of Soviet control. Initially it was known as Revolutionary Square and to date it retains the basic perimeters that it had at the time of its conception. Moreover, most of the layout of the walkways and the natural flora are also in similar locations. Over the years of Soviet reign, the focal point of the park - the central monument - changed. Lenin, Marx, Stalin and Amir Timur have all graced the central focal point at some point in the park's history. Each of these monuments reflected the ideology of a particular stage in communist and socialist ideological development in the Soviet Union.

Primary Function

Today, and since 1992, only one year after Independence, this central focal point of the park has been occupied by a monument to Amir Timur, the historical individual attributed as being the father of ancient Uzbekistan. The Independence movement and social and political fervour associated with independence has been tremendously effective in changing the way Tashkent perceives itself. As one of the primary points for tourists and visitors to the city, the Park is often regarded as the first place on the list of things to see when in Tashkent. Consequently the importance of visually and publicly declaring the newly independent state to visitors as well as to itself has been focused on places like the Park and Independence Square.

As a major informal social gathering place, the Park is currently a place that is used to its optimal capacity. This would seem to be a carry-over from the Soviet period that placed a great deal of importance on such traditional social recreation as park activity. Playing chess, strolling, meeting friends and so forth,

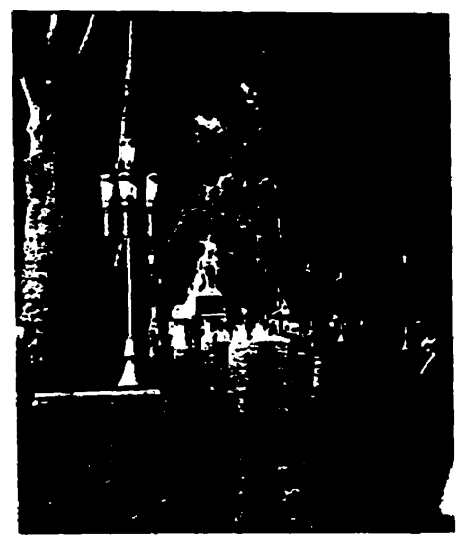


Figure 32. Amir Timur Public Garden - walkway

Figure 33. Amir Timur Public Garden - alcove with street lamp

Figure 34. Amir Timur Public Garden - steps and change in level within the garden

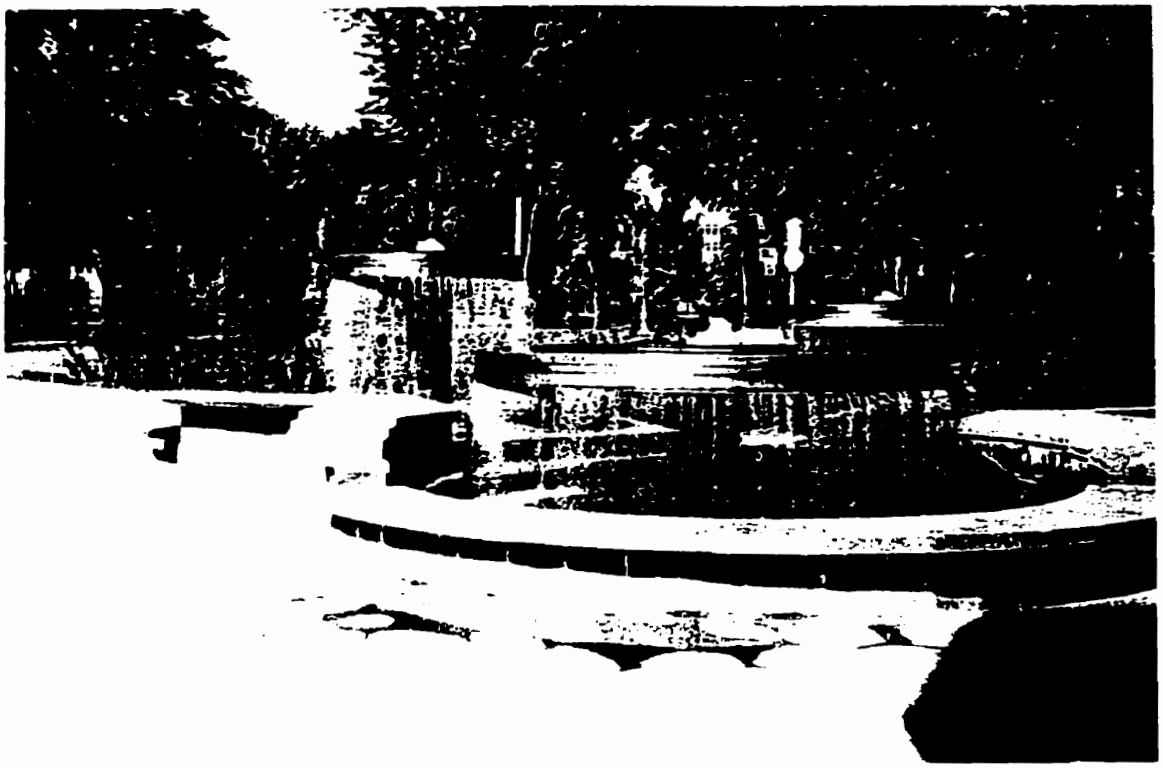


Figure 35. Amir Timur Public Garden - Fountains (contemporary)

Figure 36. Amir Timur Public Garden - Monument to Tamerlane (Amir Timur)

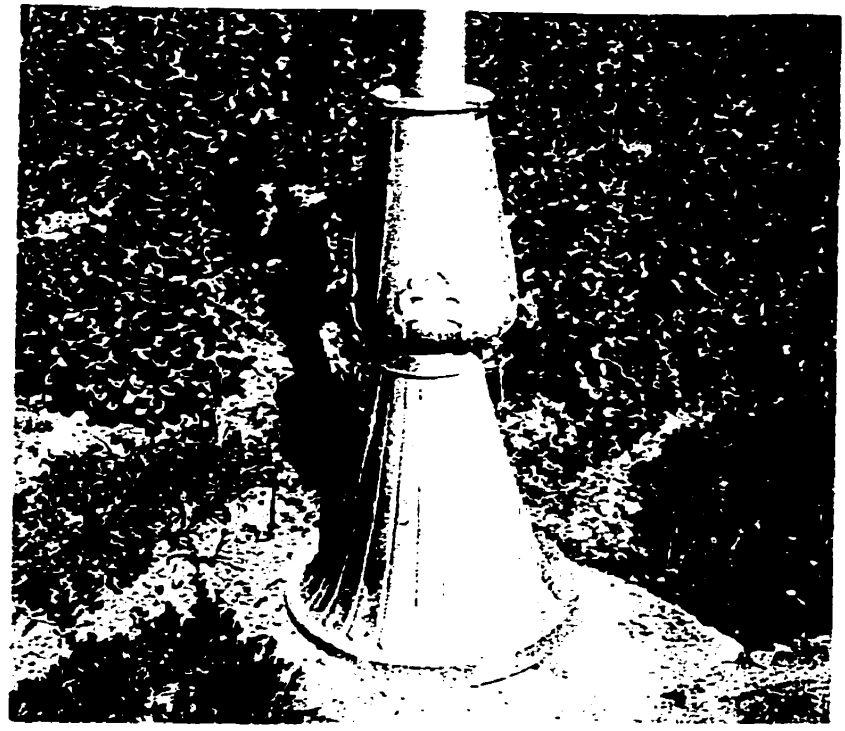


Figure 37. Amir Timur Public Garden - street lamp (base)

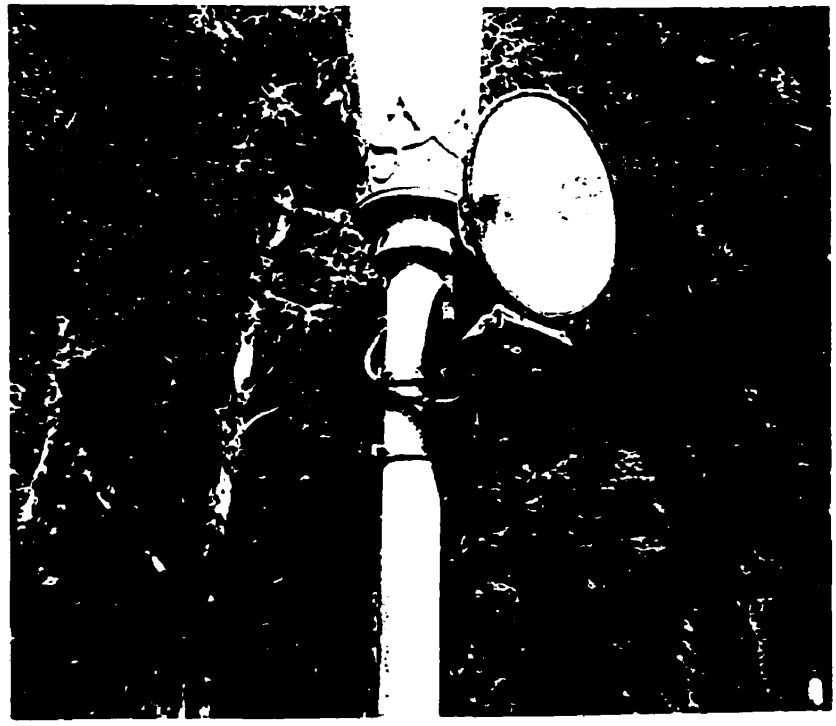


Figure 38. Amir Timur Public Garden - street lamp (light fixture)

all typical activities carried out in a park seem to be parts of the primary function of this space. A feature that perhaps sets this space apart from many other parks, at least in Tashkent, is the orientation of the walkways to roads and extended site lines. Five primary walkways radiate out from the central focal point of the park, and follow visually onto five major roadways, thus making the focal point of the Park (the Amir Timur monument) visual for some distance.

Secondary Function

While the Park functions on a primary level much like any other park, there are component signifiers that distinguish it in terms of the role it plays between itself and the public and the role it plays for the city as a whole. The patrons of the park are initially lead into the park from one of the five major walkways that lead up to the central monument. The scale (6 metres) and location of the monument draw an individual closer, while the articulation of the monument itself, the majesty of the persona sitting high upon a horse, crowned and indicating a gesture of welcome, instils a sense of awe and respect. The persona itself faces the West. While other monuments formerly in this space also faced west, it was in recognition of the location of the Government buildings in Red Square, now Independence Square. The current facing to the West can be read in two different ways, one with a positive overtone and one with a pessimistic overtone. Firstly, the positive reading of this monument could mean the welcoming of a new government, a post-Soviet, independent form of self-governance. This is signified by the welcoming gesture of Amir Timur's hand, waving in the direction of the main area of governance, the Cabinet of Ministers. Alternatively, this could be read as the welcoming of the West as a whole, the western ideal, investment, and the exchange of political and social democracy.

The location of the monument, as mentioned before, is in the central area of the park. The area directly adjacent, and surrounding the monument is lowered or sunken ground providing the visitor with a sense of entrance into a more intimate space. This would assist in the personalisation experience one should arguably have with a national leader of newly a independent state.

The location of the park is also of critical importance to the signification the park endeavours to achieve. While under Soviet reign and ultimately Soviet design, the central location of the park was meant to connote the ideal of primacy of social interaction under the governance of the communist regime. This

was achieved in two ways, one with the presence of one of the three main communist leaders leering over the patrons of the space, and the other, the adjacent location of the main government offices, directly on the axis with the Park. Today, this may hold the same meaning, depending on one's interpretation of the form of new democracy in Uzbekistan. While communist ideology privileged the idea of centrality and central control, the idea of centre could possibly mean something quite different in terms of Uzbek social and cultural values. The Uzbek city centre, as described earlier, was the bazaar and commercial activity. This activity is not present in any form in the Park today. Additionally, the Uzbek city centre was marked by an increasing density of built form. The Park is anything but dense in form.

Conclusions

While the Park has undergone changes in terms of the central monument, and slight changes to the flora that fills the Park, signification seems to be in a confused state. The location of this type of primary function still signifies the tenets of communist ideology. In fact there is little precedent in Uzbek public urban architecture and design for large common social gathering places like the park. Rather the precedent lies in the bazaar and the social role it played as a cultural meeting place, in addition to being a place of commercial exchange. Consequently, the Park is indeed a hybrid with mixed signifiers that result in unclear signification.

5.1.2.4 Independence Square

(Figures 39-42)

Introduction

Independence Square or Mustaqillik Maidoni, originally known and designed as Red Square, was one of the two central open spaces associated with Soviet political power in Tashkent - the other being Revolution Square (currently Amir Timur Public Garden). As the square around which the three primary government buildings (the Cabinet of Ministers, the Ministry of Middle and Higher Education, and Government House) were located, Independence Square played a major role in the organisation of political space. The Square itself was created from an open space directly after the Revolution (1920-1925) (see Red Square in Chapter 3 for greater detail).

Primary Function

Much like Revolutionary Square (Amir Timur Public Park), Independence Square plays a role as an informal social gathering place. It does however differ from Amir Timur in that it is by no means a park, nor is it treated as a place for sedentary relaxation. Rather since its creation the Square has been a place of transient patronage, and pedestrian movement. Initially the Square was a place for political parades and ceremony. Revolution Day, ceremonies marking the end of the Great Patriotic War (World War II) and so forth were typically celebrated in this space under Soviet rule. Today however the space is essentially void of activity. It has been relegated to a second class public meeting space, which offers neither national ceremony nor any great degree of patronage.

In February 1999, terrorist action against the Western democratic style of the new independent government resulted in the space being closed down to the public for a number of months. To date the space is heavily guarded and not looked upon as a generally safe place for social recreation. Consequently the space remains nearly empty at all times, though - officially - pedestrian patronage is welcome.

The three main government offices of the former communist government (see above) mark the boundaries of the space. Today the main government offices, that is the parliament buildings, have been relocated away from the centre, in the southern portion of the city's central district. The only government office of any real contemporary political significance is the Cabinet of Ministers. The Ministry of Middle and Higher Education and the National Library Navoi, both house political activity and are essential to the functioning of the contemporary government, but with the changes in political ideology associated with Independence, they receive less attention in terms of the primary function they offer national governance.

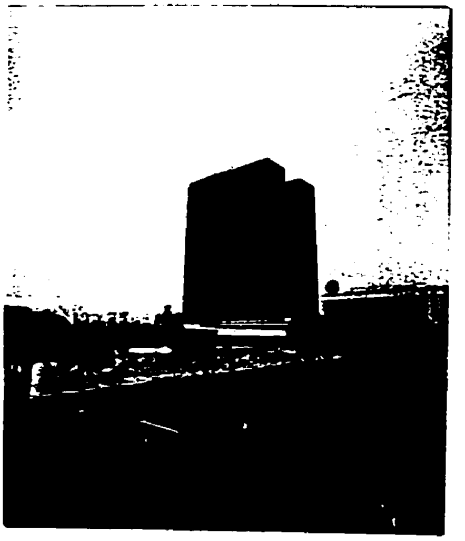


Figure 39. Independence Square - with Ministry of Middle & Higher Education

Figure 40. Independence Square - with Cabinet of Ministers Building

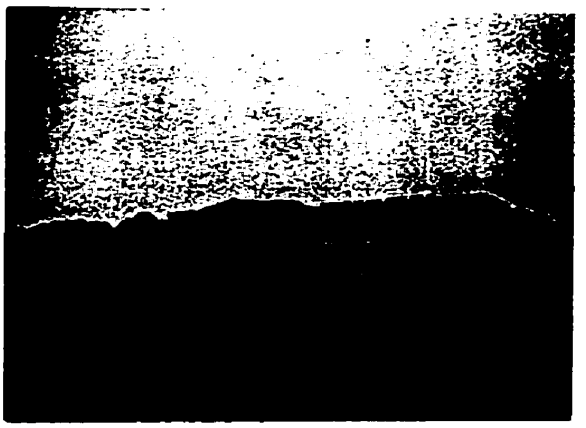


Figure 41. Independence Square - with National Library Navoi

Figure 42. Independence Square - monument of Uzbekistan (former monument to Lenin)

Secondary Function

The Square is one end of the axis on which the city centre was developed under Soviet rule, the other end being Revolutionary Square. Today the Square acts less as a social gathering place per se; it is a space that acts in organising other spaces rather than being a place itself. Communication in terms of a dialogic space is evident between the Square and Amir Timur, primarily in two-dimensional space, but also in three-dimensional space. The Square is bounded on the West, North and South sides with the East side open, receiving the on-coming Amir Timur (facing West from Amir Timur Public Park).

As a contemporary point of organisation, the Square is little more than an open space on a map of the city centre. The primary function that had once made the space of critical value in terms of secondary function has essentially evaporated since Independence. However the result is not exactly as meaningless for future development as one may first think. The central location, in purely geographic and topographic terms still allots a certain amount of organisational influence and fortitude to the space. In this respect the space does not act alone. The space exists as part of a binary relationship with the Amir Timur Public Garden. Together they create the space that it colloquially, geographically, traditionally (for the past hundred years) and socially understood as the centre of the city of Tashkent.

As one single point in a binary relationship (with Amir Timur) the Square plays an important role in the development of the urban fabric of the city. Under Soviet rule, the space was (in part with Amir Timur) 'the centre'. The centre meant a number of things in communist ideology including federalism, singularity of governance, one voice for the entire nation, central and autocratic control of social activities and behaviour and in a more analogical way Moscow. This type of signage is made painfully clear when one understands that the former name of the Square, Red Square, is a replication of that in Moscow, directly outside the Kremlin. Communist hegemony in Uzbekistan, as well as in all of the other republics was understood as a 'thing' sent from Moscow. The city centres in the republics were not a sub-system of lesser centres answerable to Moscow, they 'were' Moscow. Names such as Red Square and Revolutionary Square were meant to signify the omnipresence of the communist party and the ideology that drove its actions. In this respect, Red (Independence) Square transcended space and time and was (albeit analogically) Moscow incarnate.

Conclusions

Today this is no longer the case; today the fortitude of the Square in terms of spatial organisation and connotative signification is in a rather unique position. The space has lost its original connotative meaning, that of the political centre and incarnation of other (Moscow) geography. Instead it is a place void of any significant organisational meaning. Its location and geography has become both its primary and secondary function. It is 'the centre' because it is located there, and space is organised around the centre as a point of geographical reference. There is nothing 'in' the space that signifies the space as the centre. The signification arises out of a former signifier. The space exists simultaneously as a non-signifying object within the perimeters of its own meaning, and exists as a signified. It may be regarded as a signified and not as a signifier if one accepts the idea that it is the city (as signifier) that signifies this place as the centre (through geographical signification).

5.1.2.5 Ministry of Middle and Higher Education

(Figures 43 and 44)

Introduction

The current role of this portion of the national government is by comparison to its Soviet period counterpart, relatively subdued in terms of active participation in the execution of socialist/communists ideology. Education played a significant role in the distribution of socialist ideals. Schools, particularly middle school (grades 6 to 8) and high school (grade 9 and 10) were viewed as critical in terms of the early social adjusting that was deemed necessary in order to foster a population that would adhere to the ideals of the state that were being promoted all throughout society, later on in life. The Ministry of Middle and Higher Education (MMHE), assigned with the task of administering the educational institutions, was accorded a great deal of attention. This became evident not only in the functioning of the MMHE but also in the building that housed this administration. The building itself is notable as the first twenty-storey structure in Tashkent, and for that matter in eastern Central Asia. The building's location would also seem to hold significant meaning. The MMHE marks the northern boundary of Independence Square.

Primary Function

The primary function of the MMHE today is much as was during the Soviet era, particularly in terms of administration and structure of personnel. It also has changed little in terms of the measures it takes in administering school systems and so forth. However, a subtle but substantial difference exists. No longer is the administration of education a matter to be dealt with or manipulated by a foreign ideological code or values. The communist ideology no longer exists, and in a place such as this where it once played an extremely important role. As a result, the system - while essentially functioning as it did before - functions without the same ideals that forged the original function. To put it another way, it can be said that during this time of social and cultural transition, institutions (such as this) are likely to find themselves in either ideological limbo or else experiencing a collision of values between groups. It would seem in this case that the former is true. Uzbekistan's national ideology regarding matters such as education is currently in a state of flux. Not enough time has passed nor have the proper opportunities yet arisen to establish these tenets. Consequently institutions - and the urban artefacts that house these institutions - are functioning on a primary level that has undeveloped signifieds. In other words, while specific actions are taking place (the detailed daily functioning of educational administration) the overall action that is created collectively by these minor actions seems to be without its own primary function. The system is operating with its goals unclear. Therefore as a part of a sign system, the MMHE building, operating as signifier for a signified, educational administration, does so in an unknown fashion. Just as one understands that 'sitting' is signified by a chair, one can also understand that if the chair has no seat then the fulfilment of the primary function is impossible. The question then arises if the function is incomplete, then does the signified retain its recognisable meaning. The chair with no seat is still recognised as an apparatus to conduct the function of sitting. Returning to the example of the MMHE building, the differences arise from the fact that more subtle elements like ideological values in roles of public administration are more difficult to spot than a chair missing its seat.

Figure 43. Ministry of Middle & Higher Education - front facade

Figure 44. Ministry of Middle & Higher Education - in context of Independence Square

Secondary Function

This idea can certainly be carried over into the secondary function, the MMHE building's connotative qualities. Firstly there is the massing of the building. The singular form, the space that houses the administrative function of the MMHE, gives the appearance of two units of mass separated by a space of equal thickness. When viewing the unit in perspective (when the centre section is visible) it seems as though a centrepiece has been drawn back, and that the building is in fact made up of three equal parts. This combines with the highly detailed articulation of the façades giving the observer the impression that in drawing back the middle section one is exposing the inner workings of the building and consequently the inner workings of the MMHE. Upon closer observation the windows of the interior portion (where the middle section has been drawn back) are treated differently from those of the exterior (that face the street directly). The inner windows are articulated very simply, they express anthropomorphic proportioning in the dimensions used in the size and scale of the window. This window type is repeated continually across the entire face of the inner walls. The fact that there is this type of repetition, that it is located in the interior of the building, and that the window contains anthropomorphic proportioning would seem to connote a meaning of human function, or rather mass human contribution to the effort of administration. This idea is certainly made clear in terms of the George Orwell novel '1984', where the worker is little more than a cog in the machine of society. This proves to be a particularly interesting point for the analysis of the MMHE building. It would seem that at first look that massing of the building proper, and the stress put on the 'functional' connotations (inner works, plain appearance, etc) would lead one to believe that this was an artefact resulting from the 1920s or 1930s and the field of constructivism or maybe even rationalism (as there seems to be a rather complex geometric articulation of the exterior windows). But in fact the MMHE building was built in the period directly following the 1967 earthquake. As such it would seem to follow a very different ideology. The MMHE can be categorised as an artefact exhibiting qualities of socialist realism. The concept of the Soviet citizen as one of an infinite number of identical workers in a factory or cogs in a machine emphasises society's interpretation of the totalitarian regime. From their point of view (that of the average Soviet citizen) their role was to be understood as making their collective, anonymous contribution to the advancement of the Union as a whole. The MMHE connotes this with the interior windows. What does make this building particularly interesting is that while referencing meaning and signs

associated with a strongly 'Soviet' character and ideology, it simultaneously demonstrates the canonic iconography associated with a period of constructivism that promoted the recognition of Uzbekistan's republican identity. This can be explained by the period of architecture in the 1960s in the Soviet Union that responded to nationalist sentiments after Stalin's death but using socialist realism (and its totalitarian connotations) in ironic ways. This is apparent in the MMHE example. Moreover upon analysis one sees that the irony present in the artefact speaks of the totalitarian character being a matter of primary function. The system of administration and governance, no matter the outward appearance (connotative signs), whether it be nationalist or otherwise, is still managed and given life by totalitarian ideology.

Conclusions

The MMHE building plays an important role in the definition of the space referred to as Independence Square. It forms a northern boundary to the space, and its individual scale allow the casual observer to take particular note of the space. It's function while critical to the functioning of that portion of governmental administration is not denoted as such in terms of its location. As the Square's location has changed meaning since Independence, the meaning the building derives from its geography has also changed, and consequently the individual meaning of the building as artefact unto itself (within and for itself) is in disjunction with its geographic (location) signification.

5.1.2.6 Cabinet of Ministers

(Figures 45 and 46)

Introduction

The Cabinet of Ministers building in the past two years has been of particular importance, especially in terms of nationalist sentiment, anti-governmental terrorist action, and national security. In February of 1999, the Cabinet of Ministers building on the south side of Independence Square, was targeted for terrorist action against the national government. A group of militant orthodox Islamic terrorists, referred to as the Wahhabi targeted this building as a point of action that needed to be taken to demonstrate that the national government is headed in a direction that is not in line with Islamic goals nor with the values of

certain Islamic leaders in the area, namely Afghanistan. As a result, the Cabinet of Ministers building's north facing wall was exploded by means of a bomb planted in a neighbouring car. This is not only important in terms of national sentiment but in terms of the building itself, for after the terrorist action the building was renovated thoroughly.

Primary Function

The contemporary exterior of the CMB (Cabinet of Ministers Building) is marked by a transformation in denotative signs which when compared to the MMHE, directly across the Square, leads one to understand immediately that a different message is being communicated. The CMB functions as the space in which the various ministers from each of the established departments gather for debate and resolution of pressing issues. Essentially the function of the Cabinet is similar to that of the House of Commons in that political discourse is the overriding utility of the space. As such one is struck by the markedly different means by which this artefact communicates political space, than for instance the two other adjacent artefacts (MMHE, and Navoi). Of the three artefacts, the CMB is in fact (due to the extensive renovations after the explosion) the youngest of the three buildings (Navoi being the oldest).

In terms of its function within the space, the CMB obviously provides the southern border to the space referred to as Independence Square. However, in addition to this, the CMB provides perhaps the only truly politically active artefact in the space. While the MMHE and the National Library Navoi both function in terms of political administration and governance, their roles have diminished significantly from the previous era. This decreased significance is felt in terms of both the primary function they house (under Soviet rule significant, but currently less so), and the connotative, secondary function (the signs of Soviet authority and ideology are losing their popular meaning in contemporary, independent culture).

Secondary Function

In terms of the CMB and its connotative signification, one can readily see that the exterior façade, in staking a claim of visual difference, is a form of self declaration, or a demonstration of one's own identity. The analysis does not even need to go very deep to understand this. The three artefacts that mark the space of Independence Square, mark three distinctive periods in Uzbek (Tashkent history). The CMB

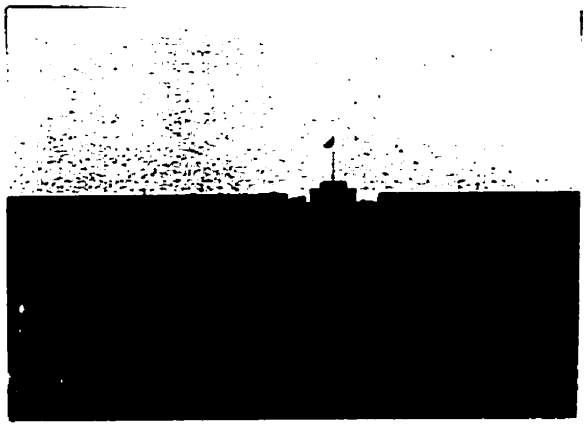


Figure 45. Cabinet of Ministers Building - front facade

Figure 46. Cabinet of Ministers Building - perspective with landscaping

plays the role of first step out of the cycle of Soviet suzerainty. Consequently it is likely that the way one reclaims one's own identity is to state in a very clear way that one is 'not' what it was or used to be. This seems to be the case here. The CMB is something other than Soviet. However, in order to descend from something it (the thing from which one descends) should be first recognised thereby making the rejection of what was (in the new identity) more clear. This is certainly the case in terms of the artefact's massing. The artefact is immense in scale. Additionally, it is primary in shape and fundamental articulation. This would seem to signify the earlier forms that were associated with Soviet political architecture. In fact within this space this kind of spatial manipulation is evident in the MMHE building across the square. From this base, the rejection of the form takes root in two predominant ways. Firstly the materials used in the building façade are dramatically different in term of connotative meaning. Reflective (mirrored and tinted) glass in the form of curtain walls seems to wrap around the building creating an effect that the adjacent environment is mirrored or apart from the building. This sort of effect, i.e. the transparency or translucency of glass or the mirrored effect created by tints can be closely associated with the transition to democracy that the government has undergone since 1991. The connotation behind glass being a recognition of the importance of sharing and honesty between the government and the people that it governs. Put another way, in this sort of material use, glass prohibits a closed system of administration (people metaphorically see what is going on in 'the government'.

The second way the CMB rejects the former political (Soviet) language is in its ordering. While this is very subtly done it nevertheless signifies a change that is critical is connoting the activities of contemporary democratic politics. This change in formal ordering is seen in two aspects of the CMB. The first is a change in the rhythm of the fenestration. On the front façade one notices that the spacing of the windows follows an irregular pattern in some places, letting the rhythm of the window and pilaster falter. One can read this in terms of a rejection of the canonic iconographic laws that typically govern Soviet political artefacts. The symmetry and rhythm that is present in the Navoi building and in the MMHE building demonstrates this connotation. In addition to being a rejection of this type of formal ordering, this may also be read as a rejection of formal ordering as a whole. That is to say, while symmetry and canonic icons used in Soviet artefacts signified the importance that ideology played in governing social and cultural activities, the rejection of this type of ordering signifies the rejection of the primacy of ideology. This point

is also made in the placement of the main entranceway to the CMB. The entrance portal and articulation of 'entry' is done not only in a spatial location that is 'off centre', but in a way that downplays the importance of the grand entry. Again this can be read as a rejection of the formality of process or function. The function or process of entry is subtly indicated with an interruption in the roof line and the minor articulation of the entry portal itself. Moreover, as has been mentioned, the placement of this portal is also of key importance. The entrance is neither in the centre of the front façade, nor does its placement create a visual balance for this façade. Again one may compare this type of articulation with the Navoi building. Here both rhythm and symmetry (balance) dominate the front façade. Additionally the front entry way is very clearly defined.

Conclusions

The CMB can be regarded as one of the major successful attempts in Tashkent in declaring itself anew. Moreover the ordering and superficial treatment that may easily become incorrectly categorised as 'window dressing' is actually effective in terms of what it is meant to signify.

5.1.2.7 National Library Navoi

(Figures 47, 48, 49)

Introduction

The National Library Navoi is perhaps somewhat of a misnomer. The NLN (National Library Navoi) building, while having undergone change in terms of its primary function (since it creation) is nevertheless today, for the most part a building that houses government services. Originally the NLN building was referred to as Government House when it was finished in the late 1920s. As Government House the building essentially functioned as the Soviet version of the White House, i.e. the function was to house the residence of the local communist party leader, and to act as a central office for the

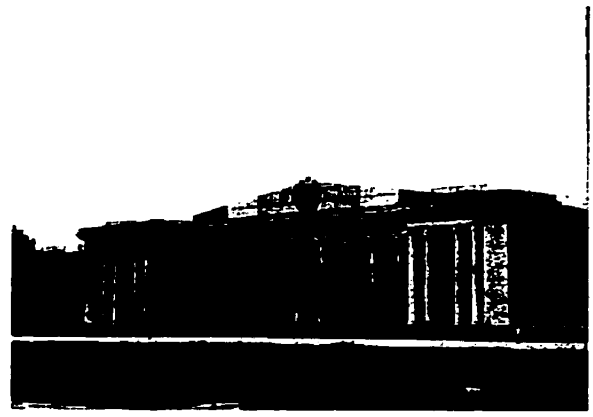


Figure 47. National Library Navoi - perspective

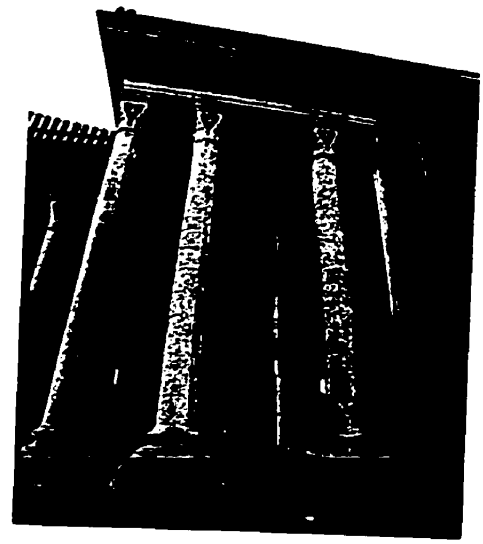


Figure 48. National Library Navoi - entranceway

Figure 49. National Library Navoi - fenestration

most critical ministries. Since 1987 and the beginnings of the perestroika movement, the building's (Soviet) political function has waned and the central portion of the building was dedicated to housing the nation's most important library deposits. However the building's left and right wings still function as political offices for services including the organisation of youth camps and groups, the Arts Council and the National Copyright and Press Service. While these governmental services are not by any means similar to the ones that preceded them, they are nevertheless branches of the national government that contribute to the administration of social and particularly in this case cultural activity.

Primary Function

The primary function has been transformed from its original function, but only in terms of the specific services that this artefact houses. In more general terms this building has become more reflective of the current times that it is currently apart of than a typical example of an artefact that demonstrates a new use. The building may, in this regard, be referred to as multifunctional. That is, the NLN houses the national library as well as the aforementioned services. However, since this transformation from single use to multi-use, the building itself has undergone little superficial change to reflect these internal changes. Aside from the addition of signage that is now in the Uzbek language and the national symbol located atop the entrance portico, the building has remained relatively unchanged.

Secondary Function

It therefore is necessary to analyse the parts of the artefact in terms of its Soviet components (signs). Such signs would include a front façade demonstrating a colonnade, and exaggerated entrance; a symmetry that is created both by a rhythm of fenestration and the colonnade; and a scale that elicits a feeling of grandeur. All of these signs were critical to the totalitarian ideology that guided socialist realist architecture. The connotation of such signage (as mentioned elsewhere in this analysis) marks the stability, and adherence to law or ideology that is greater than any one individual's personal or cultural aims. The totalitarian mindset (ideology) and its accompanying architectural language (socialist realism) created buildings such as the NLN in order to instil feelings of faith in government, and to portray government as a separate entity greater than the people that it serves. The belief in government as an entity separate from the

people is not as clear as it may seem if casually understood. The ideas of rationalism, and scientific thought and the role they played in the development of Western culture run parallel to the role ideology plays in totalitarian (Soviet) culture. Ideology in this respect was viewed as infallible, and the exponents of this ideology (politicians, policy makers, social leaders, architects, planners and so forth) were viewed as the voices of this infallibility. Urban artefacts such as the NLN were designed to be 'great'. They were signs of composite components of greatness and the classical. In these terms socialist realist architects and designers co-opted ideas (signs) from the past, regardless of their context or cultural and social signification in their respective chronological period (much like contemporary urban designers and architects use the post-modern paradigm as a crutch for a likewise misappropriation of cultural and social signs of various periods).

Conclusions

The NLN speaks of greatness, order, faith and infallibility by using signs from classical architectural languages such as those developed in ancient Greece. The colonnade and portico, and the rhythm and balance created by the fenestration portals have no cultural roots in either Russian (Soviet) or Uzbek urban design. In this respect they are void of local (cultural and social) meaning. They are nevertheless artefacts and components that are recognisable and readable as signifiers of signifieds that have come to have a separate meaning from their original signification. As such, the lack of change or evolution on the exterior (secondary function) of this artefact has enabled it to be a part of a contemporary post-modern language, in much the same way that the newly built Zarafshan Movie Theatre is articulated.

5.1.2.8 Tashselmash Palace of Culture

(Figures 50 and 51)

Introduction

The Tashselmash Palace of Culture built, in 1967, is an example of the type of cultural apparatus used under Soviet hegemony to disburse 'correct' social ideology and practice. Tashselmash is located at the end of Hamza Street directly adjacent to the Selmash Factory, and is currently operated by the

government in much the same manner as has it been since its construction - however with minor modifications.

Primary Function

Before independence, the Tashselmash was an outlet for Soviet social and cultural ideology; the activities that were conducted in this space were designed with specific goals in mind (primary among these was the shaping of the individual and his attitude toward social life and lifestyle). Activities such as group craft workshops and leisure gatherings such as dances were invariably infused with Soviet ideology and values that would inevitably change the participants' views regarding social interaction.

Today the primary function of the Tashselmash building is very similar, at least in terms of social structure. Still loosely managed by the municipal government, the importance of the spread of a particular social ideology is still present but with a highly modified context and set of cultural values. For the most part, this space has been designated by the municipal government as a social gathering space for the youth of this portion of Tashkent. More to the point, this space has been appointed as a youth discotheque for those in this area of Tashkent who cannot afford other places considered to be upscale in terms of financial cost. The Tashselmash nevertheless functions as a social gathering place with perhaps a more subtle representation of cultural values, but at the same time their effects on social activity is still very prominent.

Rather than a place of government intervention and induction of social ideology through 'family oriented' or 'collective' activity, the current Tashselmash is a place of government neglect, 'Europeanization', and arguably social decay. As the building itself is still under the management of the municipal government, privatisation of this building is not yet possible, and - as a result - the facilities currently present (the construction materials, water, maintenance and so forth) are the same as they were at the time of construction. Consequently, Tashselmash is in a state of decay. Moreover the forum created for contemporary social nightlife seems to follow a European model. European music, alcohol, and negative social interaction (violence, narcotic use, and promiscuity) are closely associated with events held in this space.

Figure 50. Palace of Culture - front entrance

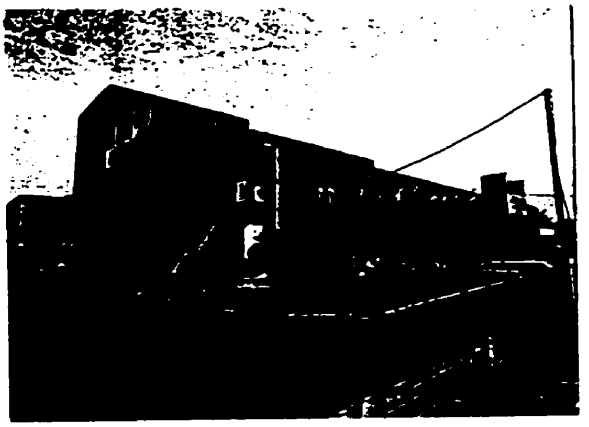


Figure 51. Palace of Culture - perspective

Secondary Function

The building itself, located in a residential area, continues to signify - through its built form - a meaning that seemingly no longer communicates a message to the user of the space. Put another way, the connotative meaning associated with built form does not follow the primary function in the way it was intended. It does however communicate an idea that is very relevant.

The simple massing of cubic forms ascending vertically to the backside of the building and the flat, unadorned surfaces connote a meaning of simplicity and primacy of function typically associated with constructivism. Fenestration and open portals are absent save for the main entrance. One may read this as the solidity of the form (not lightweight penetrable glass, but impenetrable solid walls) connoting the solidity of the activity that is held within this space.

The entrance is the sole portion of the building that exhibits a type of articulation that is perhaps more vivid for the casual observer. The two intersecting rectangular components that mark the entranceway are reminiscent of De Style in their communication of movement. This could be argued in a couple of ways, but perhaps the most relevant way would be as follows. As the building is overwhelmingly characterised by visual impenetrability and solidity, as well as large simple massing of cubic forms, it could be likened to that of factory - or at the very least a place of manufacturing. With this, accompanied by the potential swinging movement connoted by the entrance arches, one may in fact read this building as a social factory or even an ideological machine. As the superficial appearance of this structure has not changed since its construction, this type of analogic design would have communicated an idea understandable to a generation experiencing the pressures of industrial development and superiority. Moreover, this would have the structure and the event in communication with one another. As a discotheque for youth the primary and the secondary functions would seem to be in a state of disjunction. But in fact this can be read another way. The neglect of the government of certain services and buildings has led to places like the Tashselmash turning to what may be described as 'the lowest common denominator' for cultural recreation. Consequently, this has led to an increased decay in social relations.

Conclusions

When regarding the Tashselmash from this point of view, the connotative signification of the factory seems to fit. The rapid pace of industrialisation and the insignificance of the individual (all tenets of the communist ideology) have left a society yearning for individual cultural expression. As a result, the first and often the easiest turn to take in this regard is personal gratification, as occurs in the present use of the Tashselmash. But this may be viewed as exchanging one foreign ideology for another. The discotheque is turning out 'individuals' in droves. The Tashselmash has become a place where youth can come dressed in European clothes, drink and associate like 'Europeans' seem to do (at least in films), and endeavour to create a personal identity. In this respect the Tashselmash is a place whose primary function has remained the same in terms of social manipulation resulting from government intervention (or in this case a lack of intervention), and whose secondary function has changed, but only in terms of context. It is no longer connoting the industrial factory for social unity and progress, but the post industrial, abandoned factory and the rebellious fervour for individuality (and associated collective decay).

5.1.2.9 Selmash Factory

(Figures 52-57)

Introduction

At the end of Hamza Street is an area referred to as the Selmash. Selmash is the abbreviated name standing for *Selskokhozyastvenniy Machina*, or Agricultural Machinery. The name is derived from the factory established in 1969 that was a major contributor to industrial employment and development for the city. While the predominance of industrial development in Tashkent has waned since the 1960s and the communist era as a whole, the factory remains in production, producing tractors, threshers and similar agricultural machinery for the nation. The portion of the building facing the front street (Hamza) is the central office division of the factory responsible for the administration of the factory's services, production, distribution of machinery, labour council and so forth. The portion of the complex that is responsible for the actual assembly and construction of the machinery is unavailable for analysis. This however is not of major concern, for the portion of the factory that is available for analysis is generally what is accepted as

the social statement that Soviet architects concerned themselves with when referring to the factory as an urban artefact.

Primary Function

The primary function of the Selmash Factory was twofold. Firstly, the role of the factory, at the time of the Selmash Factory's construction, was essentially following the communist ideology of the collectivisation of social behaviour and for that matter society as a whole; the factory's social role was more than to simply produce machinery for agricultural development, it also was meant to employ a large number of people for the collective purpose of industrial development.

Secondary Function

The artefact itself has a particular role in its communication with both those who work within the confines of the factory, and the casual observers of this artefact. It is clear that there is a specific social message to be read from an artefact such as this. The elements that are particularly noteworthy are the singularity of the massing, the overwhelming use of concrete as a building material, the repetition of similar windows, and the general absence of superficial articulation. Qualities such as these are generally associated with constructivist architecture, where emphasis is placed on the functionality of the artefact, and the external reflection of internal use.

While this artefact was constructed at the end of the 1960s, well past the era of constructivist predominance, there still seems to be call for this sort of urban language when articulating the idea of factory. The factory's language may be looked at in terms of both socialist realism and constructivism and the form is likely to come out using very similar languages. The socialist realist notion of primacy of ideology over localised or individual social and cultural values might see the Selmash Factory as that part of Soviet culture that is essential to the greater good. While requiring signifiers that demonstrate stability and faith as are used in political artefact (such as the National Library Navoi), the factory is not a place that houses ideology (political space) – rather, it is a place that applies ideology or institutes it into the social framework. In its application or institution of ideology the factory is very clearly performing a function. The symmetry, rhythm, use of classical elements and so forth that would signify an infallible ideology

Figure 52. Selmash Factory - perspective

Figure 53. Selmash Factory - perspective

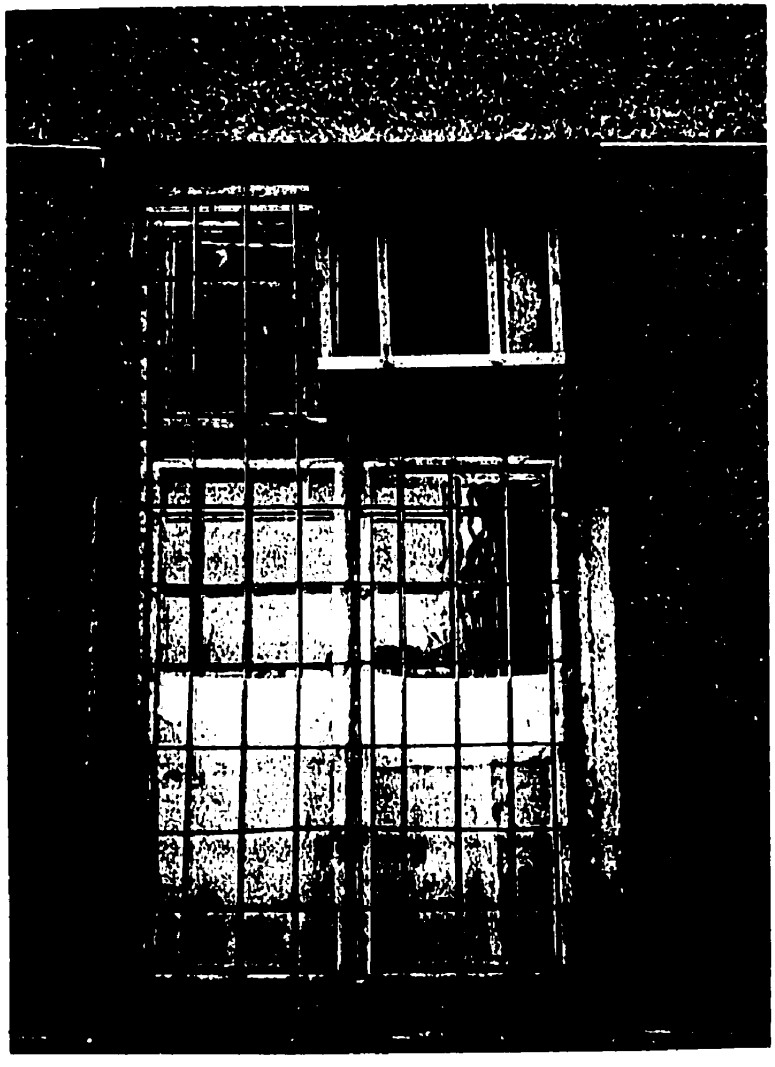


Figure 55. Selmash Factory - window

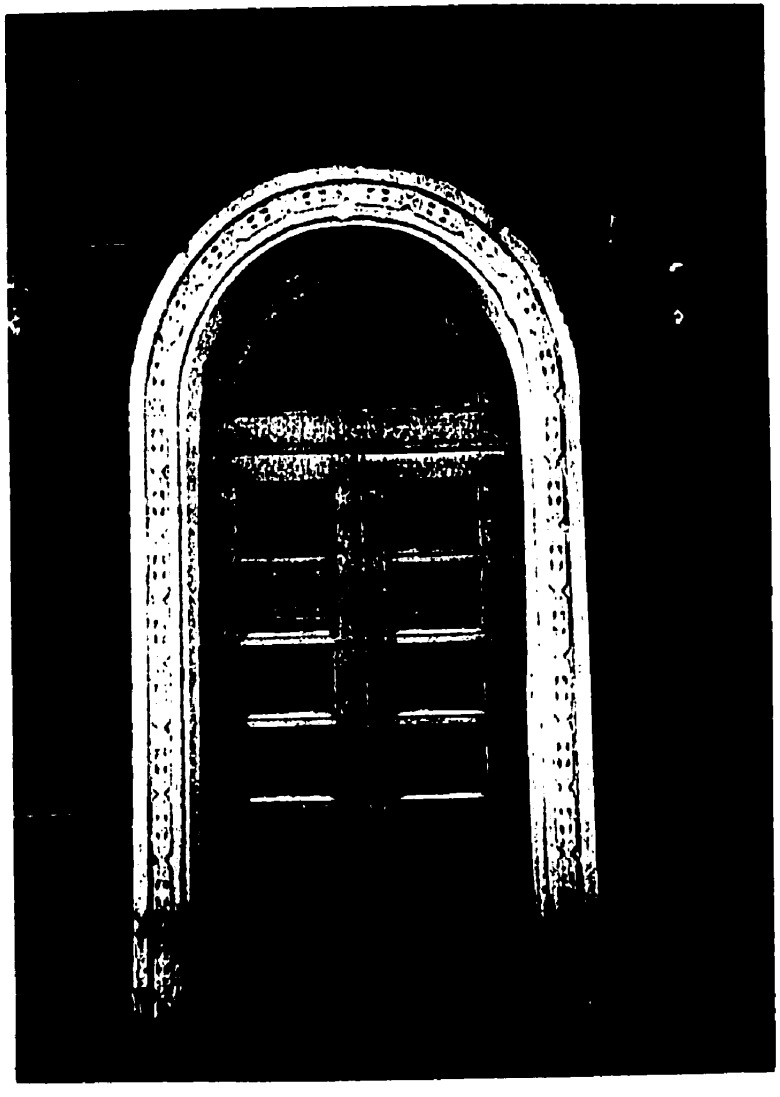


Figure 54. Selmash Factory - doorway

Figure 56. Selmash Factory - fenestration

Figure 57. Selmash Factory - rhythm and massing

would have to be modified into signifiers that connote the functioning of this ideology. In this regard the use of constructivist tenets would seem to be in complete harmony with socialist realism as long as monolithic massing was used. Indeed this is the case for Selmash. The Selmash Factory stands apart from its immediately adjacent environment by sheer size. The scale of the artefact is the one compromise that the constructivist would have made. The scale is necessary to connote the meaning and importance of communist ideology.

Conclusions

The Selmash Factory is an example of a purely Soviet artefact, both in terms of its primary and secondary function. Its primary function has not changed since the building's construction, but the secondary function seems to have waned. Just as the Palace of Culture no longer speaks to an audience connoting the same meaning as it once did under Soviet rule, the factory too has lost some of its original meaning. The artefact is nevertheless read (signified through its various components) as a factory, but the meaning of 'factory' in its more generic sense has changed, thus changing the meaning of the individual factory. In other words, as the value of the primary function has waned, so too has the significance of the secondary function. As such, the Selmash Factory is perhaps the least dynamic urban artefact in this analysis. It is neither 'becoming' something new due to modified use or superficial articulation, nor has it decayed to a point where meaning arises from its decadence (as with the Palace of Culture). Rather, it is slowly fading at a rate that does not connote increasing significance socially or culturally.

5.1.2.10 Soviet Apartment Building

(Figures 58-65)

Introduction

The Soviet apartment block is an urban artefact that reflects socialist ideology in much the same way as the Palace of Culture. Both are tools of social modification, and both express and make paramount the ideology of the state over the individual. This is certainly the case with Soviet residential accommodations. In Tashkent, as was the case throughout all of the Soviet republics, collective living, that is attached housing, was far and away the dominant means of habitation for urban Soviets. This example of

a Soviet apartment block is located directly on the street Hamza, at the corner of Zhukovskiy and Hamza. It was built over the period from 1974 to 1978.

Primary Function

This Soviet apartment block functions in terms of the collectivisation of an urban populace and the creation of a forced community. Communist ideology found one of the most important outlets for social modification in the apartment complex. Having living quarters so closely located to one another promoted a feeling of collectivity and more importantly a feeling that individual expression would be frowned upon by the collective. The function of such an urban artefact was to control social behaviour and expression (socially and through the medium of built form). Habitation was meant to be standardised, and to standardise the individual.

Since independence however, many changes in the built form have taken place, both naturally and through individual will. Once again government neglect towards maintenance of facades and the structure itself has lead to an appearance of visual decay. This is particularly evident in the front panels that line the balconies. Each apartment in this complex is furnished with a balcony that opens up onto the street. The plan of each apartment was identical up until the time of Independence. After this point government regulations prohibiting personal modifications (home renovations) within the apartment or to the exterior of the apartment were lifted, and consequently the shape of the collective housing unit has changed dramatically. With the removal of this building control individuals are now free to modify their apartments in whatever way they see fit, within the bounds of their personal finances. As a result this apartment complex at 47 Hamza Street presently shows signs of change.

Generally it can be seen that aside from the balcony portion of the front façade, the building exhibits a very unadorned, unarticulated face. Neither the windows (the portals themselves nor the trimming) nor the doors exhibit any degree of superficial treatment. However, the balcony area does show signs of modification. The panels that line the base line of the balcony are in a dilapidated state, with paint peeling away and reinforcement bars exposed. Generally, Soviet methods of construction, particularly of residential developments are considered to be sub par, and have in recent years been characterised by an appearance of decay and faulty materials. This is certainly present

Figure 58. Soviet Housing - in context

Figure 59. Soviet Housing - perspective

Figure 60. Soviet Housing - entrance

Figure 61. Soviet Housing - stairwell louvres

Figure 62. Soviet Housing - stairwell railings

Figure 63. Soviet Housing - ornamental panels

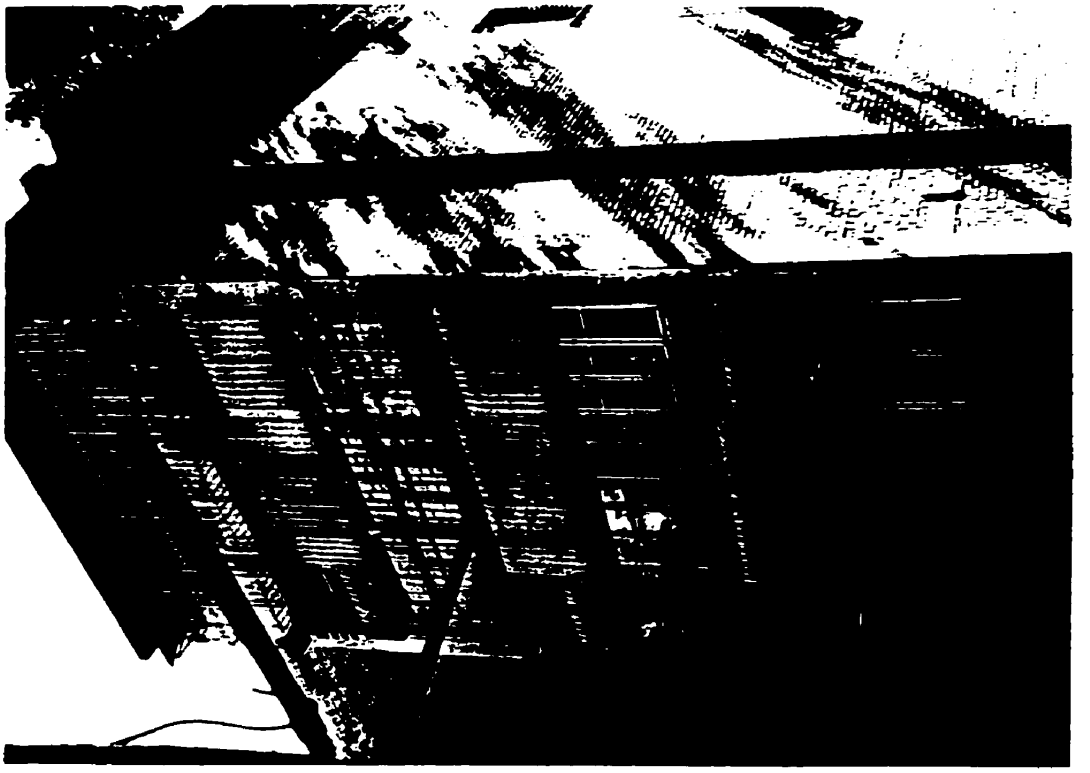


Figure 64. Soviet Housing - east side

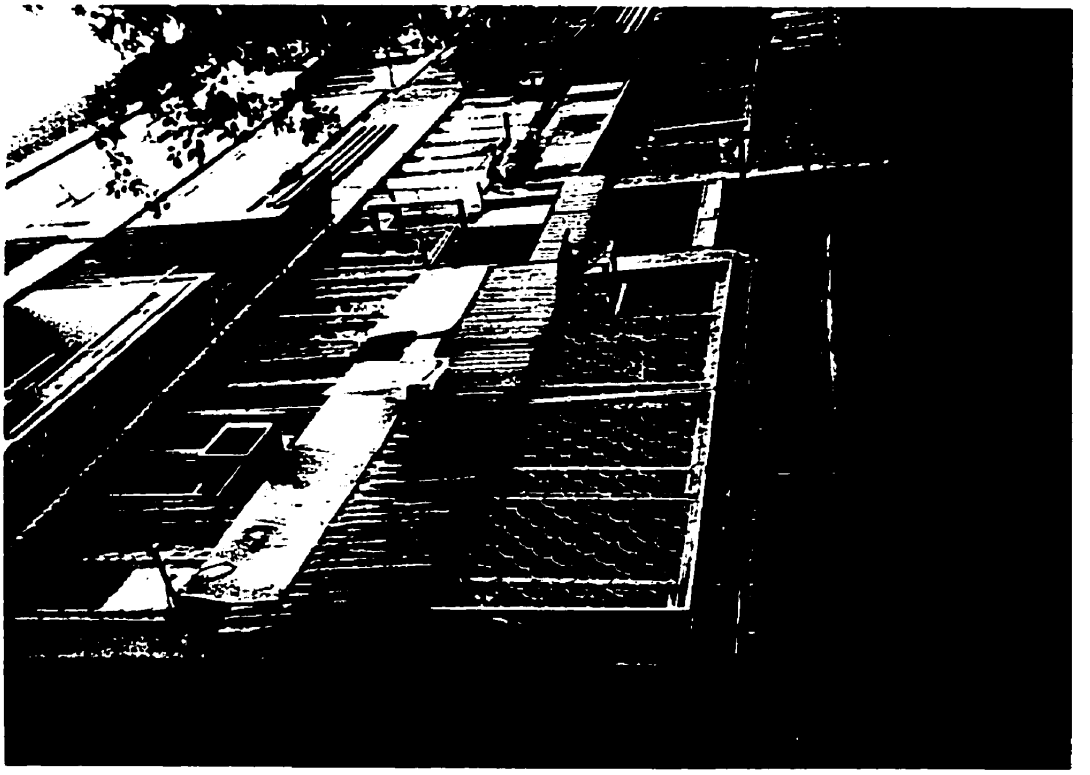


Figure 65. SoviHousing - north side

in this example. For almost all of the balcony areas there is a metal mesh fencing or barrier is present. To be sure this feature is fairly recent, and is regarded as a response to the growing crime rate that has come to plague Tashkent.

Secondary Function

The apartment complex at 47 Hamza Street has a number of minor signifiers that connote a message of decay. However, the building as a whole still represents a clear example of revival constructivist architecture. Though constructed in the mid-to-late 1970s, the building is an example of function influencing form. And in this case the function is the housing and provision of shelter – collectively - for a large group of people. The five-story apartment building wraps around a small, shared courtyard space from three sides. While this area is primarily used for social recreation, one can see the analogic design that is used in attempting to communicate the idea of the courtyard house. The apartment walls that face onto the inner courtyard are broken up with balconies as in the front façade, but additionally there are the staircases that are open to visual observation. Louvers provide glimpses into the staircases as people ascend to their respective apartments. In this respect, the inner walls (those facing the courtyard) are more visually penetrable to the people of the courtyard - ideally those who also live in this apartment complex. In this way the apartment complex is accurately signifying, analogically, the courtyard house. The exterior (that facing the street) is predominantly unadorned with small windows and plain surfaces, while the interior is more open (visually), with a central open-air space designed to cater to more intimate social recreation of the residents.

Conclusion

Consequently, this example of a Soviet-style apartment complex has two major lines of signification present in one signifying form. The apartment complex is both a tool of collectivisation and communist ideology, in that it brings different peoples together into a larger collective family, and it is a cultural adaptation to this problem of collectivisation. In order to have the residents respond to the form in a positive way, and thereby making the transition of lifestyle smoother in analogic form - the courtyard house

was used. The apartment complex is an analogy of the courtyard house in spatial organisation and in terms of social recreation (the courtyard space).

5.1.2.11 Mir Supermarket & Fast Food

(Figure 66)

Introduction

Collectively referred to as 'De Mir', the Mir supermarket and fast food building is perhaps one of the most popular places for social gathering during the day in Tashkent. A Turkish-owned and operated venture in Uzbekistan, Mir provides a style of Western grocery shopping and fast food that, up until its establishment in Tashkent, in 1995, was relatively unknown for the bulk of the population. The one building houses both a restaurant and a supermarket, both of which offer services at prices equivalent to those in Turkey (the 'West'). As a result, a lunch costing between five and ten dollars, when translated in light of the economic and inflationary conditions associated with contemporary Uzbekistan, becomes the equivalent of a month's salary for a person with an average income. Despite this, the services that Mir provides are showing, a profit and business is regarded as a success. This is accounted for by the number of Tashkent citizens that are either involved in one of two types of work. Firstly, there is a growing number of young professionals that have found work in international firms, where they can earn incomes that are nearly comparable to the West. The second type is normally associated with illegal activity that can range from money changing on the black market to the trafficking of narcotics.

Primary Function

As with most supermarkets the services that are provided are fairly straightforward. An environment is offered to the clientele that is for all intents and purposes similar to that in the West. Imported goods, prepared foods and products that have not until recently been offered to the consumer public of Tashkent are all made available to the clientele. Though people in the West take this type of daily shopping for granted, the provision of such a service to a public that has for its history known a very different mode of shopping, brings with it certain social and cultural consequences.

Figure 66. Mir Supermarket and Fast Food - rythm and material use

First among these is the comparison that is automatically made with the traditional bazaar. The supermarket is a place of variety, quality, accessibility and surplus. The bazaar is a less a place than it is an event. There the services are not organised in an easily accessible manner, bartering goes on, there are no quality controls, and the thing that you are looking for may not always be there. Consequently, the supermarket marks an incredibly important shift in social and cultural behaviour for the Tashkent citizen. The Western-style supermarket has challenged one of the fundamental qualities of social expression, the bazaar. Moreover, in addition to the 'improved' services and prestige associated with the much higher costs, the supermarket and its social consequences can be regarded as not only contributing to the demise of the bazaar (at least in social status) but, as the bazaar is in essence a very different cultural artefact than the supermarket, the substitution of one function for an altogether different one.

Secondary Function

The De Mir building exhibits a number of signifiers that are not normally associated with either Soviet or traditional Uzbek forms of consumer behaviour or values. The exterior walls facing the front streets show a high percentage of glass connoting a specific level of openness and transparency. However, only a small percentage of the fenestration that is shown (in the photograph) is actual window space. The dark tint present in the windows prevents the casual observer from realising that in fact these windows are false, and neither let in light nor do they provide a visual connect from either the occupants of the building or from the street pedestrians. The entranceway is articulated with awnings and the front entrance seems to follow the rhythm created by the windows. Moreover, the main entrance to the complex is situated at the corner of the building. None of these qualities are typical of urban artefacts in Tashkent. However, it can be noted that the language used to convey the desired messages is effective. The exaggerated awnings (of bright colours) signify a shelter, and a curiosity of what lies within. The transparency of the walls (the great amount of glass) connotes honesty and sharing that would indicate to the consumer that the commercial exchanges (provided inside) are worth pursuing. Additionally, the quality of the construction materials and the grand scale of the building itself would indicate a form of prestige, whether it is understood as foreign of local.

These qualities could be categorised as being effective in engaging a commercial public regardless of social or cultural values. But this fails to recognise that this type of consumption (in terms of primary function) is a new addition to social behaviour for people in Tashkent. As such, while the signs that are present would seem to communicate to a public (regardless of social/cultural values) on an archetypal level the intended commercial messages of the designer and proprietors of De Mir, it fails to incorporate signs with proven signifiers of ideas or values that are known to be understood by the Tashkent public. De Mir communicates in terms of generic archetypal signifiers rather than using adaptations of traditional signifiers.

Conclusions

Arguably, the means of communication that De Mir uses in its urban artefact can be classified as too generic, i.e. they rely on responses that are premised on the interpretation that is forthcoming from 'most' people. Whether this is the case or not, the absence of traditional commercial signs and signifiers plays a very particular role in the greater signification that this artefact contributes to Tashkent's urban language. Metaphorically, De Mir and the type of commercial service and social behaviour associated with this place, can be treated as an addition to the langue of Tashkent's vocabulary. As this primary function is new, it perhaps calls for a new secondary function to accurately communicate within itself. While initially this new parole may in fact be difficult to interpret, the increasing presence of this 'type' will eventually allow for its establishment in the Tashkent vernacular as an understandable set of signifiers. Alternatively, the lack of traditional signs provided in the body of the artefact may in fact keep this 'new parole' at bay. Current economic and social crises in the Tashkent economy have prevented the majority or rather the average wage earner to come into contact with this artefact on a primary function level. As such the distance that is maintained as a result of this economic rift, may result in this urban type (and its associated signifiers) acquiring a very different signification. That is, for many people this type of artefact may remain a symbol of capitalism, and unachievable personal and commercial wealth.

5.1.2.12 Zarafshan Movie Theatre

(Figures 67 and 68)

Introduction

Located in the centre of a pedestrian walkway on Sayilgoh Street, the pedestrian continuation of Hamza, the Zarafshan Movie Theatre and Concert Hall is a complex that provides services that have become stereotypical of the North American shopping mall. While the main function of the complex is the Movie theatre, within the building proper is a video arcade, a convenience store, a small clothing shop, an automatic teller, and a dinner theatre. The complex began construction in 1996 and was finished in 1999.

Primary Function

After Independence a large number of foreign investors, particularly from Turkey, have shown a great deal of financial interest in the post-Soviet economy of Uzbekistan. One of the most successful ventures to date is the Zarafshan Movie Theatre. Situated socioeconomically in relatively the same position as the De Mir complex, the Zarafshan caters to a small, but personally wealthy portion of the Tashkent populace. When viewing this complex in terms of its primary function the immediate response is the comparison to the North American mini-mall or strip mall. It may be easy to identify the mini-mall as an urban artefact or phenomenon unique to North American suburbia, but it difficult to understand the artefact in the context of Tashkent's city centre. Its scale and diversity, arguably, do not make sense as a long-term venture. With even a small increase in clientele, given an economic upswing in the Tashkent economy, would render this store insufficient for the demands that would be placed upon it. At present it is a temporal venture for a very select portion of the public.

In the complex, as with the De Mir building, one sees an overwhelming amount of glass present. In this case however, the glass windows along the front façade are (at least on the main level) true windows allowing one-way vision onto the street. Aside from the fenestration (both false and true) there are a number of construction and functional features that should be noted. At the main entrance is a set of columns forming a portico, the roof of which is open to the sunlight by means of louvers. The massing, in staggered planes, forms two open balconies that open up onto the main entrance and the front street. The colonnade is continued outward from the entrance along the remainder of the front façade creating a

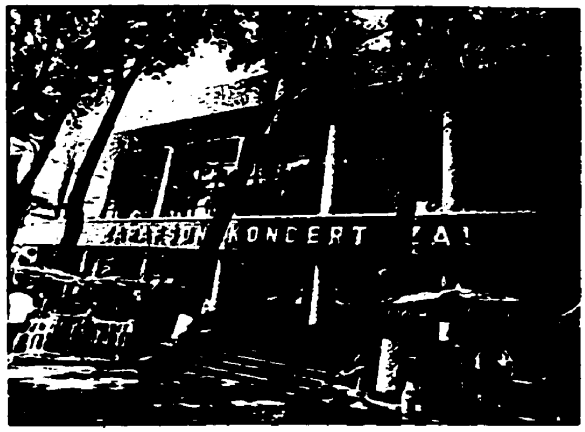


Figure 67. Zarafshan - front facade

Figure 67. Zarafshan - main entrance

geometric rhythm with the individual panels of glass in the windows replicating the portioning created by the colonnade.

Secondary Function

The constructional (functional) features of the Zarafshan would not seem to seem to be part of the Tashkent vernacular, at least when taking in the context of the building's primary function. But in understanding the cultural dimension, both post-modern and post-Soviet, one comes to appreciate the irony that is produced through the signification this building implies. The grandeur of the portico, the colonnade, and the classical portioning of the windows are all features that are relevant to a post-Soviet urban environment, particularly in terms of a post-modern, post-Soviet environment. The neo-classical features (portico, columns, portioning etc.) were all central signifiers for the socialist realists of the 1930s through to the 1950s. At that time these signifiers were used to signify stability, long-held traditions, solidity and a scientific rationale. Though most of these signifieds did not necessarily refer to the social condition of the Soviet Union or the government enforcing those ideals, they were nevertheless key components (paroles) in the Soviet vernacular, and in particular Soviet governmental architecture.

Conclusions

While personal entertainment, arcades and the cinema are a far cry from the primary function of the Soviet government, the use of these signifiers in a post-modern urban environment is of particular importance to the understanding of those forms. Postmodernity often treats chronology and history in a tongue and cheek manner. This is certainly the case in the Zarafshan. The ironic use of signifiers from socialist realism (architecture) in the development of a recreational and thoroughly consumptive space is effective in creating signification that is comprehensible for two reasons. Firstly, the use of such signifiers, while ironic, nevertheless creates a link between the new primary function, and the vernacular that is used to express that function (secondary function). While this secondary function will have to be learned (to associate these signifiers with the new primary function), it still allows the casually viewing public to make archetypal links to familiar forms. Secondly the ironic use of past forms for completely unassociated functions is not without precedence. This technique, while currently one of the canons of postmodernity, was also a technique used in the later years of socialist realism. Architects of the later years following

Stalin's death, began to use neo-classical signifiers in new, and more often than not, ironic ways. It can be concluded then, that the Zarafshan is certainly part of the Tashkent vernacular, both in terms of its connotative signification and in its new primary function relating as it does to this connotation.

5.1.2.13 New Apartment Building

(Figures 69 and 70)

Introduction

Directly across the street from 47 Hamza is a site of new construction. This is the site of a new apartment complex that is to be finished by the end of the year 2000. It was initiated two years ago in 1998, as a joint Uzbekistan and Turkey venture. The individual apartment units were sold even before the construction broke ground.

Primary Function

While the Soviet style apartment unit across the street emphasised a communal lifestyle, this new project contrasts that ideology with tenets of individualism. Each unit is 1200 square feet and is broken up into six rooms. Access to the units is through one of three separate stairwells. Perhaps the biggest difference in the format of the complex is that it follows a European model in both design and plan. Bay windows and balconies predominate the front façade, extending the living space beyond the confines of the apartment proper. Both in the front as well as in the rear of the complex, each unit is furnished with a high percentage of window space, thereby allowing visual contact from both the resident and the casual observer.

Figure 69. New Apartment Complex - perspective

Figure 70. New Apartment Complex - front facade

Secondary Function

This type of residential development marks a break in habitation practices rather than an evolution, for some of the residents of Tashkent. While the Soviet apartment block across the street was dramatically different in its ideology from the traditional courtyard house, it nevertheless maintained a formal (analogic) link with the courtyard house. An Uzbek resident of a Soviet style apartment complex, while living a dramatically different lifestyle resulting from his living environment, nevertheless was able to make an analogic link to a 'place' that was on some archetypal level more familiar. Whether this can be qualified as an evolution or not, the transition from the traditional to the Soviet seems to be more contiguous than from either the traditional to this 'new' type, or from the Soviet to the 'new' type.

The new apartment complex signifies more than a new stage in urban living for Tashkent citizens; it marks the break with certain traditional living patterns and lifestyles associated with residency. The new complex stands alone as a single block, neither wrapping around itself to create a common space for the residents, nor does it induce a communal attitude. Furthermore, the extensive use of glass and bay windows seems to signify an outward ostentation and visual sharing that is neither typical of Uzbek nor communist social values. The massing of the complex is also unique to this new style of building. The front portion seems to be pinned on four large columns suspending the body of the building between them. While this massing can often be seen in Islamic architecture in its most generic form, it is not a type prevalent in Uzbek architecture, and certainly not residential architecture. Additionally, this complex is (will be) coloured in a way that is bright and inviting. The modesty of the exterior of traditional Uzbek homes and the often severe disregard for superficial decoration without an ideological underpinning behind it (typical of Soviet architecture) does not seem to be present in this new artefact.

Conclusions

It should be noted that despite the advances in building technology, and the personal human comfort that may result from such advances, certain modes of habitation should be considered when developing a living space for a group with particular (or learned) social values and cultural ideals. The new apartment complex presents a signifier that has little recognisable meaning for the contemporary Tashkent citizen. A learned or archetypal response to certain types of living space has not yet expanded to include

such urban artefacts as this new complex, let alone the social and cultural signification associated with it. Consequently, this artefact carries only the meaning of prestige associated with economic wealth and a expanding international economy.

It should also be noted that, while certain signifiers within the body of the complex (the massing pinned by the columns, the rounded archways, and the building materials used) may in fact resonate with viewers or even residents of the complex, the primary function and the secondary function should be classified as in a state of disjunction. While this is typical of a post-modern interpretation of past ideals and forms, it prevents the viewer from interpreting the artefact in terms of his own culture. The syntagm that is read as a streetscape with a living space has undergone a paradigmatic shift, which could be regarded as gibberish. Recalling the syntagmatic chain, 'the cat sat on the mat', one can parallel this with the new complex in similar terms. While the signification of certain components is readable (windows, doors, arches, and columnar massing) paradigmatically they do not form the linguistic 'sentence' that is read as a place or residence or home. Rather, the mixed meaning, or more accurately, the incomprehensible signification associated with this artefact is read not in terms of understanding the messages provided, but associating the misunderstanding with a signified that is established as 'new', 'wealthy', 'progressive', 'Western', 'better'.

5.1.3 Interviews

Introduction

The interviews conducted for this thesis were intended to derive data that would contribute in such a way as to bring forth the elements of the built environment that can be qualified as mediating between the social and cultural values of the social group (the people of Tashkent) and the built environment as urban artefact. As mediators of the social and cultural values, the architects and urban designers interviewed for this section of the data collection and analysis were chosen for their current and past roles in forming the physical character of the city.

In keeping with the rules and regulations of the ethics review scheme the identity of the individual architect or urban designer will be kept confidential and any specific references to projects that they may have been involved in (which can divulge their identity will be excluded).

The interviews were performed over a period of seven days during which the ten urban designers and architects were interviewed with regards to the question listed in the interview instrument. Three of the ten architects (the term architect will be heretofore used to indicate both architects and urban designers) were unable to perform the interview process in-person. The three individuals proposed an alternative method of interview. As the three interviewees were to be unavailable for the in person interview, they had suggested that the interview be conducted over the telephone. As the interview process (the posing of the questions) was to go hand in hand with a visual accompaniment of the images (photos and maps) gathered for the Tactics portion of the data gathering, it was felt that conducting an interview with images for certain individuals and not with others would significantly skew the results. As such the interview portion of the data gathering only included those seven individuals that were able to perform the interview process in person.

Results

Each of the seven interviewees were read the Guiding Statement portion of the interview instrument, which allowed them to orient themselves in terms of location (within the city centre), and to be familiar with the type of environment that was under analysis. Additionally, each of the interviewees was provided the photographs and maps collected as part of the data gathering section of this thesis to allow a clearer vision of the artefacts under analysis and to assist in the comprehension of the specific topic matter of this thesis.

The process of interviewing was expected to go as follows. The guiding statement would be read and the package of photographs and maps would then be presented to the interviewee. Then, the first of two primary questions were to be posed. After the second primary question was posed, any specific material that the investigator felt was not addressed would be raised by a series of secondary questions or auxiliary questions.

Of the seven people interviewed, one interviewee did not require the follow-up portion of the auxiliary questions. It was felt by the investigator that this individual, after being posed the two primary

questions, touched on all the material that was intended to be addressed in this interview instrument, and those specific themes that are raised in the auxiliary portion of the interview instrument. The six remaining interviewees while answering in full the primary question, were felt to require the auxiliary question in order to develop answers that were perhaps more detailed than they would have been otherwise.

Primary Questions

1. *With respect to Tashkent's city centre, describe the relationship between political independence (Mustaqillik) and urban form and spatial organisation.*

For the most part the interviewees expressed the view that the period of political independence from the Soviet Union was still very much in its early stages of growth. Significant changes in the built landscape are still to come, and political independence needs to grow and develop within the city and the state before it can have a systematic effect on the built landscape.

Additionally, it was expressed that though political independence is only a matter of nine years old, there are a number of visible changes to the urban landscape that are occurring. Much of the new development including the Mir Supermarket and fast food complex and the Zarafshan Movie Theatre were felt to be 'good' signs of development. In this sense there seemed to be a close connection between Independence and development, i.e. growth of any kind is valued as movement in the right direction. Further, many of the interviewees felt that Independence has been an influence that is allowing the city centre to better reflect Tashkent as a whole.

With reference to the city centre specifically, Independence was associated with foreign investment and joint ventures. Mir Supermarket, the Zarafshan Theatre, New World Hamburgers and the Darshon Bank - located along a single strip of land in the city centre were all referred to in terms of beautiful, appropriate and modern (contemporary). Moreover, the area itself (the portion of Hamza that runs between Amir Timur Public Park and Independence Square) was referred to as expressing the most contemporary development in terms of urban design and architecture.

Urban form in the city centre was generally addressed as Uzbek. It seemed to be the case that the interviewees likened the post-modern or contemporary style that pervades this portion (the strip between

Amir Timur and Independence Square) of the city centre as their own adaptation of the contemporary style. This was the case for six of the seven respondents. One individual felt that, while the city centre was improving in terms of general appearance, the contemporary style that is associated with these new developments is not what is needed in terms of Tashkent's vernacular. However, this same individual felt that despite the lack of local content in these new developments - it was good to see improvements made in terms of the visual appearance of the built landscape.

In terms of spatial organisation, the interviews were split in terms of whether or not the city centre's spatial ordering was changing or not. Four of the interviewees felt that the city was essentially the same in terms of its plan and how certain types of services and artefacts were located. The presence of new services such as the supermarket and fast food building was explained as being appropriate for the city centre and an attraction to bring people into this space. The new services were not criticised in terms of their primary function; rather, they were accepting of the fact that new ideas are needed to bring people back into the city centre. This was further explained by one individual as being a change in urban organisation and function to meet contemporary and changing cultural needs.

Three of the interviewees felt that the city centre was in fact changing its spatial organisation. They expressed the view that the changes in services while helpful in bring people into the city centre, were changing the way people interacted with that space, in particular the strip of Hamza between Amir Timur and Independence Square. Consequently, the city centre was now a place of recreation based on a different kind of service than was accepted before Independence.

2. *What urban components within Tashkent's city centre do you associate with the following: "Tashkent", "Uzbek", "Independence", "The Soviet Period", "The West" and "Traditional".*

When the question of association of certain types, ideas or words with certain types of urban artefacts and spaces was posed, the following results were offered:

Tashkent

7 out of 7 respondents offered	Independence Square (the square itself)
5 out of 7 respondents offered	Amir Timur Public Park
5 out of 7 respondents offered	The Bazaar (in general)
3 out of 7 respondents offered	Sayilgoh Street (not part of this analysis but within the study area)
1 out of 7 respondents offered	The New Cabinet of Ministers Building

Uzbek

7 out of 7 respondents offered	The Bazaar (in general)

Independence

7 out of 7 respondents offered	Independence Square
4 out of 7 respondents offered	Amir Timur Public Park (the monument to Amir Timur specifically)

The Soviet Period

4 out of 7 respondents offered	National Library Navoi
4 out of 7 respondents offered	Ministry of Middle and Higher Education
3 out of 7 respondents offered	Soviet Apartment Building

The West

6 out of 7 respondents offered	Mir Supermarket and Fast Food complex
5 out of 7 respondents offered	Zarafshan Movie Theatre
5 out of 7 respondents offered	Sayilgoh Street

Traditional

7 out of 7 respondents offered	The Bazaar
4 out of 7 respondents offered	The Residential Courtyard House

Auxiliary Questions

These questions were posed to six of the seven respondents since one of the respondents, in the answering of the first two primary questions, seemed to address these auxiliary questions. Nevertheless, the responses included in this analysis of the auxiliary questions will include that person's responses.

3. Describe the role of Tashkent's city centre to the city of Tashkent with respect to the following periods.

Pre-Revolutionary, Soviet, Independence

The question of how the city centre interacts with the city (Tashkent) as a whole, according to the different periods was not fully understood by the respondents. More to the point it was not clear to the respondents as to how this role of 'centre' might change - particularly with respect to the rest of the city. While it was recognised that certain contemporary changes in the city centre, such as the addition of new services and the superficial improvement of public space, has changed the activity within the centre, there did not seem to be enough of a change to influence the role of being centre, geographically, socially and culturally. Moreover the pre-Revolutionary role of the city centre is somewhat of a misnomer as the contemporary city centre as it existed in the Soviet era and in the contemporary era, did not in fact exist before Soviet intervention.

4. *What points within Tashkent's city centre do you most closely associate with the term "meeting place", during the following periods?*

Pre-Revolutionary

7 out of 7 respondents offered	The Residential Courtyard House

The Soviet Period

6 out of 7 respondents offered	Red Square (now Independence Square)
5 out of 7 respondents offered	Revolutionary Square (now Amir Timur Pubic Park)

Independence

7 out of 7 respondents offered	Amir Timur Public Park
5 out of 7 respondents offered	Independence Square

5. *How do you, as an urban designer, communicate "culture" through the built environment?*

The idea of communication of culture through the built environment was perhaps not the clearest way of drafting a question for post-Soviet architects. The age range for the respondents was between 50 and 70 years of age. As a result, the architects interviewed in the portion of the data collection process were significantly influenced by the Soviet period and, more importantly, by the period of Soviet architectural doctrine and ideology.

Rather than communicating 'culture' through the built environment their task was the communication of Soviet and socialist ideologies through their built works. They expressed that for the majority of their years as professional urban designers the material that was presented to them left little room for deviation of individual interpretation of social issues and cultural values. During the Soviet era there was only the ideology of the state and little more. Contemporary projects with which these architects are involved to some degree allow for a greater degree of individual expression, but to date in Uzbekistan there is still a strong governmental influence on public architectural projects.

So, when the question was posed as to how culture was communicated through their work, the answers almost inevitably referred back to ideology, when discussing their Soviet era work. Contemporary projects

while leaving little room for individual interpretation are nevertheless more concerned with 'culture' than their Soviet counterparts. Currently in post-Soviet Uzbekistan the trend in urban architectural projects is the privileging of artefacts and motifs that are regarded by the government as either traditionally Islamic or traditionally Uzbek. Traditionally Islamic architectural motifs are regarded as elements of architecture that will help Uzbekistan establish itself in the Islamic community as a Moslem state. Consequently, urban designers and architects are persuaded to use architectural elements that are easily identifiable as 'Islamic'. The respondents expressed the view that even if these motifs and elements are not of local (Uzbek) origin they are generic enough to elicit positive responses from the general public.

Uzbek traditional elements are also regarded as desirable components to new urban projects. As such certain types of geometric or canonic iconography are used on building façades and domed or cupola roofs are preferred for structures that are meant to signify prestige and power. The privileging of such Islamic and traditionally Uzbek urban signs or languages has taken the place of the Soviet ideology that once guided the formal growth of the city. As these architectural signs are accepted as 'needed elements' according to the respondents, regardless if their presence is chronologically appropriate or even understood in the same way as they were originally intended, it can be said that this trend is a form of ideological communication and not cultural. The majority of the respondents agreed that the role of the urban designer in contemporary Uzbekistan has changed little in this regard; they are still communicating ideology, and not reflecting issues that address 'cultural' issues per se.

6. *If we define landmark as a space or artefact within the built environment of Tashkent's city centre, that visually identifies location, what landmarks do you feel are most intimately connected to the space in which they are located?*

Overwhelmingly, the respondents expressed the view that the monument to Amir Timur in the Amir Timur Public Park was easily the most identifiable of all the landmarks within the study area. Moreover, the respondents felt that having a monument of a national heroic figure such as Amir Timur in the centre of the city was an appropriate way of marking the centre of the capital of Uzbekistan and the centre of social leisure activity.

Aside from this response, the interviewees failed to express views regarding the other artefacts within this case study. Their interpretation of the term and idea of 'landmark' therefore seems to be under a

different mental description than what the investigator had in mind when drafting this question. However one respondent noted that the Selmash Factory was a strong indicator of spatial location. He noted that the area surrounding the factory had colloquially come to be referred to as the Selmash as a result of this factory and the role it had played in employment and social activity during the 1970s. This was the type of response that was aimed for when the investigator drafted the question. The fact that the respondents failed to interpret the question in this way is an indication that questions of this nature (ones that require an agreed upon definition) require particular attention when being drafted.

7. *Using the definition of landmark, from question #6, what landmarks most vividly communicate a cultural ideology associated with the following periods.*

Pre-Revolutionary

Responses to this line of questioning were comparatively more revealing than question 4. Perhaps the clarity offered by the association of landmark with a particular chronological period or era enabled the respondents to more readily associate the idea of landmark with something other than its own definition (as in question 4).

Pre-Revolutionary 'landmarks' however, were not identified within the study area. Such urban artefacts as the residential courtyard house (an artefact under analysis in this study) and the canal system (not a part of the analysis in this study), while of the time period, were not recognised as being in the category of 'landmark'.

Soviet

Soviet landmarks within the study area were much more readily identified. Red Square (Independence Square) and Revolutionary Square (Amir Timur Public Park) were the overwhelming responses to this question. It should be of interest to note that the two locations that were identified as landmarks of the Soviet era had two qualities in common. Firstly, both of the sites are open spaces (squares) rather than material artefacts, and secondly, both of these landmarks are simultaneously identified as landmarks associated with Independence.

Independence

When realising that the two responses to the Soviet era matched the responses to the Independence era, several of the respondents indicated that their responses needed clarification. The majority of the respondents expressed the view that the recapturing of urban space and artefacts was a valid and legitimate way of creating new space and establishing contemporary landmarks. One of the respondents noted that the practice of reusing previously established space, for creating a new place or identity, was a process that Soviet architects were well versed in. This respondent further noted that socialist realist architects of the 1950s and 1960s in the Soviet Union applied previously established architectural components to modern buildings in the hope of establishing the Soviet Stalinist urban identity.

5.2 Review of Analysis and Data Collection

A cartographic analysis, photographic analysis and a set of interviews constituted the data collection process for this case study. Of the three tactics used in collecting data for this case study and while all contributed to the formation of a body of material needed to illustrate in detail the 'case' in question - the interviewing process seemed to be the weakest link. The photographic and cartographic analyses both relied on acquiring material from objective sources, the archives of the Ministry of Cultural Affairs. These sources can be referred to as 'objective' as they provided material without discrimination. The discrimination was on the part of the investigator. The interview process, on the other hand, required an interaction with a source of information that was entirely subjective. Each of the interviewees had their own biases and more importantly their own understanding of particular issues. This became evident in the answers given for certain questions. It would seem that greater attention must be paid to the drafting of certain questions when unsure of the interviewee's understanding of certain material. This is not to say that the wording or the manner in which the inquiry is conducted should be changed (though this too is critical). Rather the issues of the inquiry itself should be carefully examined. If the central issue of the case study is a subject matter that is foreign or poorly understood by key people targeted for the interview, then efforts should be made to either question the contribution of the 'key' people or else investigate material that is related and understood by the key people in order to create a bridge between the new material and the

interviewee's understanding. This would seem to be particularly true in a cross cultural situation such as this.

Even with such problems the interview process nevertheless contributed to the depth and detail of the case study. The photographic and cartographic reviews contributed comparatively to the depth of the case study more substantially. The photographic review allowed for an analysis of material that is generally not accepted as worth of such empirical research, i.e. the range, which this case study attempted, is much broader in scope than would normally be expected for such a semiotic analysis. Generally, semiotic analysis of urban space focuses on particular issues or categories of material objects, such as residential space or political space or the like. In such reviews the level of detail required for a proper case study may be resisted. In providing a review that is mulit-object-oriented the following analysis offers material regarding the 'case' that might otherwise be overlooked, and could potentially contribute significantly to the project.

5.3 An Iterative Process

The aim of the Tactics and Analysis portion of this thesis is the development of a discursive tool that is to be realised in the intervention section of this study. A discursive tool may enable the process to take primacy over the product or solution. Consequently the role these portion of the study (Tactics and Analysis) play in the Intervention should be significant.

In designing the Tactics approach and in performing the Analysis is was imperative that the process be firm in its structure and loose in its execution. This is what can be regarded as key in developing an iterative process. Iteration is that act of repeating something that has already been performed. In this case study the component to be iterated is the structure of the Tactics.

The tactics used in the data collection may be divided into three types. Firstly, the cartographic review and analysis is considered. The cartographic analysis relies on an open pool of information (archive sources, documents, records and so forth). This material is then interpreted by the investigator in a subjective manner, according to specific ideals, aims and values that may be present in either the

investigator himself or in the subject matter of the study. This first portion of the process develops a sense of the common knowledge, or previously recorded knowledge, regarding the topic of investigation.

The second type of tactic is the photographic review. Here the investigator again, with the same biases as in the cartographic review, collects material from an open source of potentially unrecorded or unknown knowledge. The material that can be gathered in this 'type' of tactic is critical in providing a depth to the analysis that is free from the biases of others involved in recording similar material. While the biases of the investigator are nevertheless present, the material has the opportunity to be newly known. This is of particular importance as this may be compared both qualitatively with the common knowledge of the first tactic for biases and potentially reasons for those biases.

The third type of tactic is the interview. The interview provides material that is similar in structure to the first type (cartographic) in that it is relying on previous knowledge, but a difference exists in the degree and specificity of the commonality of the knowledge. The interviewee provides information that may be apparent to one person or a small group of people. Likewise the material may be as commonplace as that found in the archives. As such this type of tactic may be particularly difficult in designing and drafting. The contribution that it may make however could be significant. The goal of scientific research is commonly accepted as the accumulation of new knowledge. More accurately it is the re-working of existing knowledge in forms that result in information that may be used to understand situations more thoroughly. This ideal makes itself particularly apparent in this third type of tactic. The collection of information from sources that may be common, or new results in a dialogue between two live sources. This dialogue in itself is a potential contribution to the momentum of the issue under investigation, i.e. the dialogue that occurs raises issues not only directly effecting the subject matter of the study, but also the nature by which it is known.

An iterative process of inquiry that involves these three types of tactics allows for the type of thorough understanding that is needed in performing a case study. The three types that are used in this case study result in reviews of archival maps, old and new photographs, as well as interviews with selected individuals. In being iterative these processes are open to new forms (not types) of tactics, i.e. maps, photos and interviews are three forms that the three types have taken for this study. Depending on the subject

matter or changing conditions of this subject matter, the forms may in fact require change. What should remain the same is the type.

The benefit of using a process of inquiry that can be iterated is that it allows the study the potential to continually generate new knowledge. The inquiry, while goal oriented, is not structured solely towards those goals. Rather, the structure of the inquiry allows the study to meander in different directions or to select new foci depending on the social issues or conditions at the time of the study. In this case study this is particularly important. The aim of this thesis has been to discover how culture (societal conditions and values) contribute to the state of the urban form, and what those contributions mean in terms of development of the urban form and reciprocally, in terms of the development of the culture. As urban form and the cultures that produce it are continually in flux, a study such as this must be designed in acknowledgement of that flux, if it is to have any lasting meaning.

5.4 Synthesis of Tactics and Intervention

The Tactics used in this study will be incorporated into the Intervention itself in terms of addressing 'flux' both in terms of both the urban and the social. The Intervention is the development of a discursive tool directly related to the subject at hand - semiotics of transitional cultures. The Tactics are also a discursive instrument in that they are designed to operate in terms of iteration, allowing the processes that they foster to continue to interact with the players involved in particular subject matter.

The synthesis of the Tactics (general discursive) and Intervention (specialised discursive) will come together in the Manifesto. Here, the role this study plays within the area of semiotics of transitional cultures (specialised) and within transitional cultures as a whole (general) will be determined. Further, the proposal that the Intervention offers will be located in terms of its contribution to transitional cultures, both semiotically (specialised) and as a whole (general), and in terms of how the proposal itself can operate as a form of inquiry.

CHAPTER SIX: INTERVENTION: SYNTHETIC SPACE, TRANSITIONAL VALUES & TERRA INCOGNITO

6.1 A Discursive Apparatus

In presenting this portion of the study it must be made clear that what is proposed in this intervention is not a concrete solution to what may be identified as a problem. Rather, it may be looked at in terms of ideas stemming from the analysis and literature review that have been performed. In this sense the intervention is meant to initiate a dialogue between people that are concerned about the subject of this study. A person that values or for that matter is interested in the subject of semiotics and urban development in cultures that have experienced colonial like conditions will find this intervention to be a starting point for their own inquiry. It represents a direction identified by this investigator, as a potential path to take to engage in this material in a way that will better the social and physical culture in this case of Tashkent, but for that matter any similar situations in other geographical locations.

This intervention may be referred to as a discursive tool or apparatus. This type of language and description of the intervention has been chosen to emphasise that this is one investigator's point of view and that by no means should this be regarded as a 'solution to a problem'. The discursive apparatus may be used by any number of people who find this subject matter of concern; those involved in the future development of the urban centre of Tashkent; those concerned with urban heritage preservation; and perhaps those that wish to see the field of urban semiotics developed in a new direction.

The intervention is discursive, but not free from biases. While the intervention is broad in its approach, and perhaps vague in terms of concrete proposals, it is by no means vague in terms of its theoretical approach. The idea of the discursive apparatus as a format for the intervention can be instituted by its qualities, that are arguably more appropriate for this kind of subject matter. Firstly, there is the notion that an intervention or design proposal that demonstrates concrete results and actions or specific methods, to be used in urban development and heritage preservation is limited. Approaching a situation such as this, in the aforementioned manner, is likely to result in methods and actions that will be evaluated and either

accepted, as is or discarded. The discursive apparatus shies away from this tactic and advances the idea that there are multiple starting points and multiple ways of dealing with this issue. As a result the discursive apparatus offers an approach that is prefaced by the idea that it will receive positive and negative feedback, and moreover the very goal will be this type of dialogue. The feedback resulting from the advancement of a dialogic catalyst is in fact what is desired from this type of intervention. In this respect then what is offered by way of a design intervention may in fact receive negative feedback, but the structure of the intervention will be such as to allow a positive place for that feedback in the further advancement of the proposal, or indeed a new direction.

6.2 Synthetic Culture

Synthetic culture is a term that is used here to describe the conditions under which the intervention takes place. Tashkent's current state of cultural development and place within its own chronology is synthetic. Synthetic is defined as being produced by synthesis; not naturally produced nor artificial. Synthesis is then defined as the process of combining separate things, ideas etc. into a complete whole. It is in this sense that the post-Soviet urban culture and environment is described as synthetic. It is a formation of separate ideologies and social and cultural values that have made themselves whole in both the behavioural patterns of urban dwellers and in the physical environment which the inhabit.

A distinction here is made between the cross-cultural or natural evolution of social and cultural values and the idea of synthetic cultures. Synthesis will be recognised and understood in this work as the superimposition of one culture over another, in terms of ideologies, values (social and cultural), modes of living and operating within an urban environment and so forth. Consequently synthetic space should be recognised as similar in many aspects to colonial space, but not the same. Colonialism has a number of theoretical tenets that distinguish it as a separate ideology, and that take it farther than the bounds of what is understood here as synthetic space. By making this distinction it is possible to develop the issue of foreign cultural or social hegemony and not dilute the issue with the ideology normally associated with colonialism. This is not a simplification of colonialism for the purposes of urban study. Rather it is an understanding that the role ideology plays in this particular issue is large, and by introducing yet another set

of 'ideological tenets' from another body of research may in fact work to dilute the issue rather than enrich it.

In phrasing the statement, "Tashkent's contemporary urban environment and culture is synthetic", one is certainly demonstrating bias. A statement like this is the result of either personal or collective research that has led to the opinion that this situation can be categorised as such. This, however, will be accepted as the first point of contention that will come to form the start of the discursive apparatus. If Tashkent is synthetic, then in what way? As has been indicated in the literature review, the urban space of Tashkent has undergone a number of changes; the city has existed under its own cultural framework; it has experienced foreign invasion from the East as well as the West; it has been added on to under a colonial Russian ideology; and has been systemically changed under communism and the Soviet regime. Each of these stages has resulted in a different understanding of the city and consequently the urban fabric has changed its means of expression. Over the chronological period that have come to be the existence of Tashkent as an urban centre, these various eras or layers or change has come to meld with one another, to be the Tashkent urban fabric of the time. These layers may be teased apart from one another, to be understood as very distinct and very unique sets of ideals and values, much of which can be identified as 'foreign'. So while the city exists (currently and in the past) as 'Tashkent' where all of these various layers together comprise the identity of the city, they nevertheless are separate planes of ideals and physical changes that require examination if the city is to be understood in terms of its current positioning.

The current position of Tashkent may be regarded by some as precarious and extremely significant, in terms of its place along its chronology and in terms of opportunity to experience a period of 'self expression' - thereby developing a layer that is inherently Uzbek. Others may feel that this position along its chronology is simply another transition, a gap in stages of foreign cultural hegemony, that has allowed the urban population of Tashkent time to pause and identify itself, without really giving itself the opportunity to do anything about it. While this may in fact be understood as the pessimistic view of the two variations offered here, this will be the position that this investigator takes, and for two very important reasons. Firstly, this viewpoint is expressive of the inability of Tashkent culture to exert itself beyond the confines of foreign cultural hegemony, i.e. as perestroika aided in the collapse of the Soviet Union, and thus the end of Soviet Uzbekistan (Tashkent), it is accepted that the Soviet ideology responsible for urban

life and expression through built form has also died. While this position can be accepted, it must also be recognised that the vacuum created by the absence of Soviet ideology has allowed for the opportunity for another foreign paradigm to enter the Tashkent cityscape. At this time in global affairs, the typical condition that is associated with 'post-colonial' nations is in most cases is the Democratic Paradigm. While this is particularly the case in the post-Soviet republics, it can be widened to include other post-colonial states. The main social advancements associated with this paradigm are the spread of a western-style of democratic governance and foreign investment. In place from Mozambique to India to Uzbekistan, multinational companies such as Coca-Cola have placed their stamp on the urban environment.

This seems to increasingly be the case in Tashkent. Signs of foreign development and investment are beginning to convert the urban landscape from Soviet to European or even American. In accepting this point of view, what is of critical importance for this study is the exchange of ideologies. Uzbek urban culture as has been documented in the literature review, has in the last 150 years been subject to extremely influential waves of ideology. The colonial Russian ideology centred on Europeanization, and the Soviet ideology of collectivisation and the reduction of the individual. Beyond this, two things must be carefully noted about the future advancement of the synthetic culture of Tashkent. Firstly, one must recognise that it is possible to say that before foreign hegemony Tashkent's growth and development was not pinned to an 'ideology' in the Western sense of ideology. As such, one must ask how this independence from ideology was communicated in the urban fabric. And secondly, there is the question of whether the concept of a global community, and the Westernisation process that accompanies it, can be categorised as an ideology.

6.3 Time: Representing The Now

This portion of the intervention deals with the concepts of chronology and a culture's understanding of its past including what role the past plays in the functions of the present and the formation of the future.

6.3.1 The Past, Present, Future and Simultaneity

It may be accepted that the manner in which Tashkent's built form grew and developed while under its own cultural influences was significantly different than when it was modified by Russian and Soviet values. The primary difference, as identified by this investigator, was the absence of an established ideology, at least in the Western understanding of ideology. The Russian and Soviet ideologies that were present in Tashkent's physical development were separate and more importantly abstract. The grid, functionality and social need as a means of driving urban aesthetics and the city centre as analogy of political domination were all tenets of ideologies that were constructed abstractly - separate from the natural state of the urban environment. Further, they were applied from abstraction to the urban artefact and environment, with the aim of modification and control of urban behaviour and cultural expression. In this sense, ideology was the framework for a system of urban growth and physical expression that aided in the transformation of the subject culture.

Tashkent, before it was dominated by Russian and Soviet ideologies, adhered to what could be regarded as an anti-ideology. While planning existed in the form of locating certain artefacts in pre-designated geographical locations, the 'control' of how those artefacts and future artefacts would grow with respect to those locations was left to what may be regarded as organic or natural process. In a walled city, with an identified core made up of a specific residential, commercial, and political locations, one would normally think that this type of organisation would be highly controlled, both geographically and spatially. But this did not seem to be the case. Tashkent, as noted by the Russian colonists, was, according to Western sensibilities, chaotic, i.e. it did not seem to reflect the order and spatial organisation that could be understood by Westerners. Houses in the shakhristan were found in the middle of streets closing the streets off to traffic flow. Residential additions accompanying familial expansion resulted in spaces acquiring an image of disorder, being built on top of one another or in non-conventional locations.

The bazaar, in this respect, was like a microcosm of the city. The traditional bazaar would often start with an elaborate geometry for the plan, and a defined space with ornate roofing, but end up, after inhabitation, as a place that again resembled chaos. It becomes necessary to advance the idea of chaotic space, or space that adheres to a specialised and simplified ideology.

The Uzbek city, 150 years ago, and right up until the current moment seems to have this anti-ideology present in its urban development. Semiotically, the urban space of the Uzbek city reflects the Uzbek interpretation of cosmological order and hierarchy. The city has a basic form, i.e. their are certain significant locations where certain artefacts are to be located, which in their location reflects the Uzbek value system. The bazaar was traditionally located in the centre of the city, around which the shakhristan (residential quarters) would grow. The political centre, the Urda, was located adjacent to the bazaar but treated as a city within a city, maintaining its own fortifying wall and gates. This type of ordering would seem to signify the Uzbek interpretation of humankind's place within a cosmological system. Order in its simplest form was present as a pre-existing part of this cosmological system. Humankind's role within the boundaries of this order was independent, and privileged to grow between these pre-existing points. As a result, the urban fabric of the Uzbek city can, without malice, be referred to as chaotic. Chaos in this sense is a form of order that is understood and respected to be not fully comprehensible. It may be further suggested that chaos and chaotic order are accurate representations of human activity when viewed against the backdrop of cosmic or natural order.

In contemporary Tashkent the anti-ideology has again made itself apparent over top and within the order of the post-Soviet urban environment. While Soviet artefacts are riddled with decay and neglect, and while new construction sites block traffic and temporarily add to the density of the city centre, the appearance of the city is subtly beginning to reflect the type of chaos that once marked Tashkent.

The centre of the city, Amir Timur Public Park marks the Soviet centre of the city. There is no bazaar to reflect that portion of the Uzbek value system. But the interpretation of that space remains thoroughly Uzbek and more importantly thoroughly Tashkent. The Amir Timur Park signifies an order that that was beyond the control of the population. In this respect it is very much cosmological. The Soviet population accepted that there was the Soviet system and ideology, and nothing more. While directly under the Soviet system and Uzbek interpretation of that system would have been impossible, as the ideology was pervasive. In the post Soviet environment the ability to interpret one's own environment is made easier by the relaxation of Soviet ideology and practice. The remnants of the Soviet system have acquired cosmological meaning since Independence. They have become things to work around and to adapt.

Equally important though remains the problem of ideology. Two ideologies contend in Tashkent in terms of influence on the growth and development of the urban fabric. Firstly, there are the nationalistic trends that seem to be coming down from the new government. Here the Independent government of Uzbekistan feels that this time of transition out from behind the Iron Curtain, should be marked (at least in terms of the urban environment) as a time to declare the nation's identity. The government has adopted a current 'ideology' that privileges architectural and urban design projects that support Islamic and traditional styles and types. The second body of ideology that challenges Tashkent is that of internationalisation. As a newly independent state that suffers from economic and social dilemmas typical of the post-Soviet environment, foreign investment and assistance is comparatively high. International investment and development in Tashkent has thus far been accompanied by Western-style hotels, supermarkets and other commercial development, none of which is native to the Tashkent environment, but all of which is accepted by the ideology of the 'traditionalist' government as temporary but necessary.

6.3.2 Regarding the Past: From Modernism to Postmodernism

The traditionalists express their ideas through forms that, in contemporary society, would seem to be somewhat out of place. In Tashkent new urban artefacts display canonic forms and geometries that are not normally associated with the functions they house. While this type of ironic semiosis may be appropriate for what has been designated as a post-modern environment, one must first seriously consider what is meant by 'postmodernism', if in fact these new urban forms are to have a role as signifiers in the development of a Tashkent urban identity.

This investigator proposes that postmodernism in contemporary urban design and architecture is flawed in terms of its adherence to post-modern substantive theory. Post-modern architecture and urban design still maintains a relationship to the past, and the forms that mark specific chronological periods, in a very modernist way. Primary and secondary functions (the denotative and connotative signifiers) of the past are drawn upon in a way that is more reminiscent of the modernist ideal of taking what is needed to solve a particular problem, with little regard to the cultural and social ramifications that may result from the disjunction between chronology and artefact. Urban form is meant to be one of the 'higher' expressions of

visual culture simply because it is a real part of an urbanite's daily life. In this sense it is a visual art that in addition to maintaining function, represents a form of communication that interacts with an urban population regardless of request. Moreover, this interaction with the built environment plays an integral role in urban psychology, behaviour, and an understanding of one's own culture. In this regard postmodernism as it is practised currently is a form of synthesis. It is an application of ideals that are foreign either in terms of culture or in terms of chronology, or both.

Post-modern traditionalists fail to understand that in applying forms that once acted as key cultural signifiers does not necessarily mean that they communicate the same signified as they did before. As the social values of culture change so too must the forms through which these values are communicated. Using signifiers that once communicated a particular signified assumes that the artefact is understood to communicate the same signified, and that the signified is still relevant and maintains the same cultural value and meaning. There is little in the urban environment that is so eternal that it appeals to the ideal of archetypal significance. While architects arguably exist in urban landscapes, one must not confuse archetypes (forms that instil generalised emotional or spiritual reactions) with learned forms that have persisted over time.

Tashkent seems to have this type of problem with its traditionalist ideology. Forms of the past are regarded as necessary in creating or rather recreating the Uzbek urban identity. Recreating an urban identity would mean the retrieval of values and social needs that were present at the time a specific urban artefact was used. If this is the case, and if it is understood as such, the traditionalist ideology is a very dangerous thing indeed. Modifying the cultural values and social needs of the Tashkent populace through urban artefacts retrieved from a time that exhibited the type of values that the current ideology prefers, puts that ideology basically in the same category as the Soviet Union, under foreign cultural hegemony. This time however, the 'foreignness' comes not from a geography or culture but from a chronology.

What is likely to result from this type of urban growth is perhaps not as serious as this investigator has made it out to be. Rather, it is likely that a post-modern urban, traditionalist environment will be created that will not signify the same meaning as it once did, and consequently, those urban artefacts will take on a superficial or ironic meaning. The postmodernist architect, planner or urban designer must understand that the conservation of culture and the development of new urban artefacts should be treated as

a simultaneous process. Tashkent seems to be treating these two processes separately and as a result the urban fabric is failing in terms of its level of communication with the general public. If post-modern design makes the link between postmodernity in its substantive sense, and does not address the past as a place from which to randomly draw or modify forms for current use, then it is more likely that this simultaneous understanding of past and present will come to better fruition.

6.3.3 Globalisation and Maintenance of Identity

The other major dilemma facing Tashkent is the ideology that is associated with internationalism or (otherwise referred to as globalisation). The global community is a term that often refers to the state of communication and free exchange of ideas between contemporary nations and cultures. Tashkent serves a number of roles. The city centre is a point of social and physical organisation. The city as a whole is the capital of the Tashkent Oblast (province) as well as the capital of the nation of Uzbekistan. It serves as the unofficial capital of Central Asia. It is a large multicultural urban centre that acts as a gateway to Central Asia as well as to the East. And it is a major point for tourism along the increasingly popular Silk Road. In this sense Tashkent is becoming global, i.e. it is playing an increasingly important role (through financial and cultural exchange) in the global community.

With this increasing globalisation there is a certain risk that Tashkent is taking. In joining the global community it is understood that there are certain responsibilities that are required of the state. As Tashkent (Uzbekistan) is suffering from a faltering economy and industry that requires major revival and improvement, Tashkent requires assistance from other states. Generally, this assistance will come in one of two forms: either large non-governmental organisations like the World Bank will financially assistant in development through projects that improve and more often than not westernise the political economy of the state; or, assistance comes in the form of private foreign investment. While both of these scenarios are currently present in Uzbekistan, the latter seems to be having the greatest effect on Tashkent's urban fabric. The joint ventures with Turkey and Korea have changed the superficial appearance of Tashkent over-night. Since Independence the growth of the firms and the resultant advertising, construction and implementation of new artefacts has grown exponentially. Sixty five percent of the cars on the street are Daewoo (a South

Korean automanufacturing company) and buses are covered with advertising from products from both Turkey and South Korea. From the North American side, the fifteen-storey Sheraton Hotel Tashkent has recently been completed and dominates the environment for miles around.

While this type of investment is critical in getting Uzbekistan's economy on it feet, it has resulted in changes to the urban fabric that must be carefully scrutinised. The government must play a larger role in controlling the physical and cultural impression that such investment makes. Bringing foreign currency into the Tashkent economy, while a necessary action, must be tempered by urban design controls that will prevent Tashkent from being just another International City. Further, it is perhaps on this frontier that the urban identity crisis of Tashkent will be resolved. As current economic conditions seem to be the paramount, concern for the development of the city (and the country), it is likely that this type of internationalisation will increase in this manner before pressure is put on these foreign agents to modify their urban impression.

This leads to the question of whether or not globalisation, in the form described here, is in fact an ideology. Colonial Russian ideology was marked by the primacy of Western urban standards (the grid and specific amenities) and the goal of growth. The Soviet ideology was marked by social and urban transformation, and the assimilation of the individual into the collective for the greater (economic and social) good. Can the global ideology be marked by specific tenets, by which methods of development are guided and developed? Perhaps the lack of recognition of national or political boundaries marks the global ideology. It would be too easy to say the money and financial gain (while important to globalisation) are the tenets of an ideology. Rather, it can be proposed that place, location and in more abstract terms, points on the map, are not recognised within their own geography. Tashkent is understood in terms of its political economy, the opportunity to rebuild or take advantage of that political economy, and what role other nations may play in that development. The geography of places has come to mean less than the economic profile of the place. This may be evaluated in positive terms. While certainly narrow in scope, the political economy of a place is more closely in tune with its identity than its geography, i.e. ethnic, racial and religious boundaries are less likely to enter the primacy of the issue being dealt with, than the specificity of the nation's political and economic problems. In this sense, globalisation has a certain ideology, one that recognises identity (albeit narrow) over differences that once prohibited the exchange of ideas and finance

in a positive way. This is particularly important in the case of a post-colonial or hegemonic culture. It was the former recognition of differences of geography (and race, ethnicity and religion) that significantly fuelled the ideologies of the Russian colonials and the Soviets.

6.4 Plane: Spatial Restructuring

This portion of the intervention discusses the development of urban space. The section is divided up into the three major formative periods that have resulted in three distinctive interpretations of urban space and the functions that produce such space here referred to as Traditional, Modern and Post-modern.

6.4.1 Commercial Limits: Traditional

Traditionally Tashkent's spatial organisation was developed around the centre of the city. In the centre was the bazaar. In terms of signification the bazaar held primacy in cultural and social realms as the key social and commercial space in which urban residents came to meet and exchange ideas. Tashkent's city centre is no longer a place of commercial exchange, but retains a degree of social exchange.

The transition that is occurring from Soviet to Independent to Global must reflect the reinvention of commercial primacy. The identity of Tashkent as a global city or as part of the global community is pinned on its political economy and how others understand its political economy. Where the traditional commercial exchanged was marked by centrality and borders the future commercial exchange will no longer adhere to these tenets of geographic and spatial location. Commercial exchange will occupy limitless space. The city centre will recognise the primacy of commercial exchange as a key to its identity. There will be no geography for this exchange. The points where this exchange occurs will not be bounded by limits (therefore a limitless number of points) and will be temporal. The exchange will occur as long as it is necessary in any space that physically allows the exchange. The presence of these points will converge to form an urban density that is neither understood as the centre with its increased density (traditional Uzbek), nor related to points strategically laid out to operate in terms of social function (Soviet). The recognition of the commercial primacy will relate to the current global order and to the cultural need of a traditionally commercial culture. Its primacy will lie in the occupancy of 'any space', 'any location', and

'any geography'. Spatially, its hierarchical position in Tashkent culture will use omnipresence as a signifier.

6.4.2 Administrative Limits: Modernism

Municipal borders in Tashkent have served a number of roles from the origins of the city, through the Soviet period to the present. Municipal borders are political borders. They have separated the population by race, occupation, and religion (in the traditional mahallya) and by occupation and social ideal (in the Soviet sense). Locations within the city will not be according to abstract political or administrative devices. The delineation of geographical areas of the city and in particular its centre will no longer exist. Limits in this sense will no longer exist. The triviality of municipal or political borders within an urban environment will be signified by the absence of municipal boundaries. Location will be understood in terms of relative location. The populace will orient itself according to proximity. More importantly the proximity will be relative to commercial exchange. Geographical location within the city will be known according to a particular place of commercial exchange.

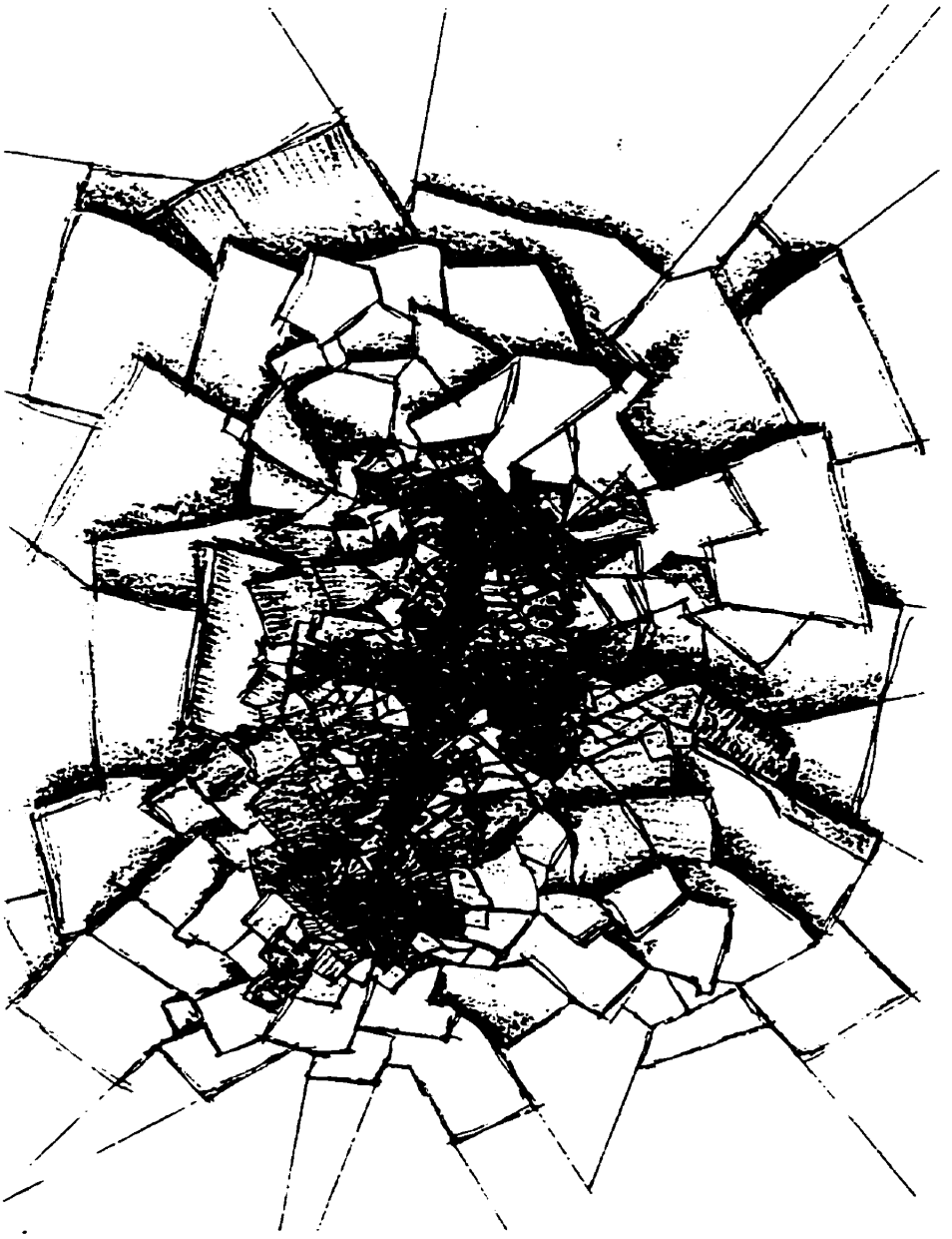
6.4.3 Consumptive Limits: Postmodernism

Spatial ordering of the city of Tashkent has reflected a feudalist mode of production in its traditional sense, with the bazaar at the centre of the city (acting as the collective place of social and commercial exchange), and the urban area itself bounded by a fortifying wall. It has reflected an industrial mode of production with its progressivist model connoting rationalism and functionalism in the placement of industry, social activity, residential quarters and so forth. And it is beginning to show the initial stages of a culturalist model with the primacy of nostalgia and reuse of past forms and means of organisation.

This investigator proposes a means of spatial ordering that privileges consumption. The consumption associated with modern commercial exchange and the type of urban culture that develops out of this consumption will be signified by the consumption of space. Space and artefact mark the syntagmatic and paradigmatic boundaries that have created the traditional Western understanding of the figure-ground

relationship. The interpretation of space or the void as artefact will mark the consumption of what was space or rather what was non-artefact. Artefacts will consume space. In this sense the traditional Uzbek understanding of space may be revived. While borders, centres and points of reference (other than the commercial exchange) will be denied, space and artefact will be interpreted in their chaotic, non-western sense. Built space will interject and consume the void and consequently create increased densities not marking centres, but rather, emphasising the insignificance of specific locations based on ideological criteria.

Geographies within the urban environment will evolve according to themselves. They will not reflect abstract ideologies. The commercial exchanges will move throughout the urban landscape finding places and occupying them, making them function as commercial space. This will be a return to the initial stages of a semiotic understanding of space and artefact. Places will exist, and a function will find the space that is appropriate for that function. As the early human 'discovered' the cave, or more accurately, understood that space to function for particular needs, so too will the populace of Tashkent. Spaces will be dysfunctional until occupancy. Consequently areas within the city will not be distinguished as 'for a particular use', and the void that exists between these 'yet to be functional' artefacts, will also be regarded in a similar manner.



6.4.4 Cultural Bedaub Figure 71. Figure Ground

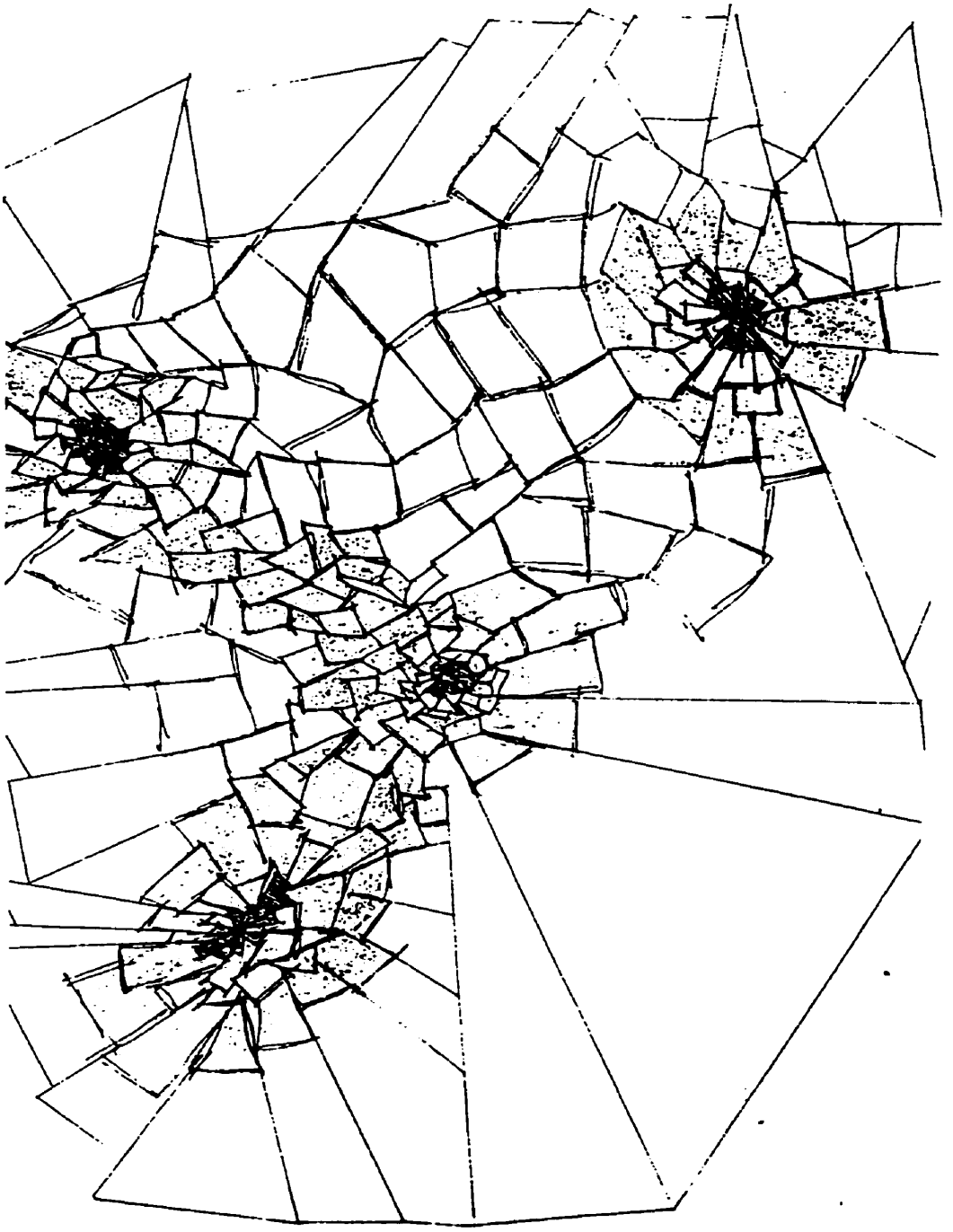


Figure 72. Cultural Bedaub - Figure Ground Detail

6.4 Lines: Making Relevant Connections

This section of the intervention deals with the reclamation of urban space. It deals with space in terms of three dimensions and outlines how it has been treated in each of the respective periods. Based on these understandings a proposition is put forward on how Independence could possibly be expressed in three-dimensional spaces.

6.5.1 Transportation Lines: Traditional

The Uzbek city had an elaborate system of roads that both connected the artefacts and services to one another, and to the world outside the boundaries of the fortifying wall. They were recognised by the Russian colonists as poorly maintained and not following standards that would be conducive to being optimally functional. Roads were generally very narrow (as traffic was almost entirely pedestrian, except along the major thoroughfares), they were unpaved (i.e. not cobbled), and the level of dust and dirt was generally very high. Though not functional for a modern or colonial lifestyle the roads in the Uzbek city were perfectly appropriate and natural for an urban Uzbek lifestyle. More importantly, the roads, streets, alleys, pathways and so on of traditional Tashkent played a much larger role in the urban lifestyle in terms of urban psychology and in terms of the meaning they held for the users of these spaces.

A road or street or alley is a functional space. It is a space that functions as a means of getting from one place to the next, that may or may not be superficially articulated. This is at least the case in the Western urban mentality. The Uzbek urban mentality however seems to view this space as a functional void, i.e. there is an understanding that there is a distinction between a void and (empty) space. Spaces such as roads and walkways seem to be treated in Western societies, at least in contemporary terms, as having almost the equal value as artefact or built form. It would seem that, in the traditional Uzbek urban fabric, space is treated as definitively subservient to built form, or even non-existent (i.e. void). But in drawing this comparison the two different types of spatial cognition reveal the different social values of the two groups, and more importantly the different message that space carries in each community. In the contemporary (post-modern) Western interpretation of (functional) space, the role space plays seems to demonstrate an

understanding that space maintains a value equal to that of the artefact, or even that space is itself an artefact, simply of a different kind. As such, the articulation and organisation of space in urban environments of the West is greatly different than what can be found in Tashkent. By valuing space in this manner the recognition and articulation of space would seem to connote the idea of balance or harmony. Post-modern urban designers and architects draw on so called 'Eastern' analogies of the yin and yang to connote this balance of space and artefact. Yet this understanding of space would seem to connote a very specific type of harmony or balance.

The Uzbek understanding of space or more accurately 'the void', is vastly different in terms of the social and cultural value that it maintains. In the urban Uzbek interpretation there is built form and void where built form will be. The value of the void is minimal, or even not existent. This can be demonstrated in two ways. Firstly on the level of the artefact, the shakhristan is an example that demonstrates this value of space. Along a streetscape in the shakhristan of pre-Revolutionary Tashkent one may find the expansion of homes across roads, cutting off circulation and leaving the pedestrian the task to find narrow, almost unmanageable pathways to pass through. The courtyard house is also an example of built form's value. The courtyard, while a void in terms of its figure-ground rarely stays void of construction. As the space is primarily for functions including preparation of market goods and household activities (such as cooking, gardening, etc.), the space is invariably crowded with building materials and makeshift construction. In many cases this space is converted into a semi-covered garden, thereby occupying as much of this space as possible.

The other example is of the city (and its centre) as a whole. The Uzbek city centre is defined by its high or increasing density. As one nears the centre density increases, the streets become narrower and winding, and the built form of course dominates. The increase in density may conversely be regarded as the decrease in space of the void. As the centre is semiotically regarded as socially and culturally of primary importance, the decrease in a certain quality would seem to indicate the low value associated with that quality. In this case it is space or the void.

6.5.2 The Radiant City: Modern

The Soviet interpretation of space essentially followed the contemporary Western understanding. Space was privileged. In fact it seemed to play a role that was perhaps more valued than built form. The extensive use of large 'public' open spaces was meant to connote the importance of collective social activity. As this was key to the ideology of socialism and communism, the use of parks, squares, and the grand boulevard was high. Moreover, the implementation of this kind of value and understanding of space into a culture that in almost every respect contradicted this value had results that greatly affect the Uzbek understanding of urban life. The current centre of the city is a park; the place dedicated to the achievement of independence is a Square; and the street connecting the two is, for one length a wide pedestrian walkway, and for the rest, a six-lane major thoroughfare.

The traditional Uzbek understanding of visual connection and hierarchy also differs vastly from the Soviet understanding. While the Uzbek sight-line was in most cases almost non-existent due to meandering, tightly (narrow) constructed streetscapes, the Soviet sight-line was incredibly important. This was particularly the case in the city centre. Here the Amir Timur Public Park played the role of visual focal point for several blocks in five directions radiating out from the centre. In the centre, at various times stood monuments to Lenin or Stalin or Marx, all of whom were visible to pedestrians along these radiating arms from the park.

In creating spaces such as these it is possible to understand that the Soviet regime greatly valued the power of visual impression and how that impression could be made - either along lines of sight (to various monuments) or via grand vehicular or pedestrian thoroughfares. In privileging spaces such as these the Soviet regime in Tashkent was connoting the idea that through the expansive use of space, rather than built form such space would come to connote a meaning of prestige and wealth. A city space would seem more open and thereby larger than perhaps it may have been. This openness visually equates the wealth of the state, since geographically expansive urban space could be used for the public good.

6.5.3 Lines of Communication: Post-modern

In both cases, the traditional Uzbek and the Soviet, the streetscape communicated the value placed on space for the respective communities. This investigator proposes the contemporary interpretation of space as follows. Streetscapes will be recognised not as space but as void. Built artefact will consume the void when necessary and thus create randomly increasing densities throughout the urban fabric. These new lines of communication will act as signifiers. They will connote the independence. Soviet space will become void, and then consumed by built form, becoming the rejection of prestige and power, and the reinvention of modesty.

These lines of communication will have no geography. The users of these decreasing voids will create their own geography. There will be no pre-assigned values to these voids. People will come to interpret these voids as having a meaning that is attributed by the user, not the designer or the ideology of the state. They will function as function dictates. Their changing form (from enclosure and built form's intrusion into the void) will continually change the shape of these spaces, thereby modifying their function and location.

6.5.4 Linear Bedaub

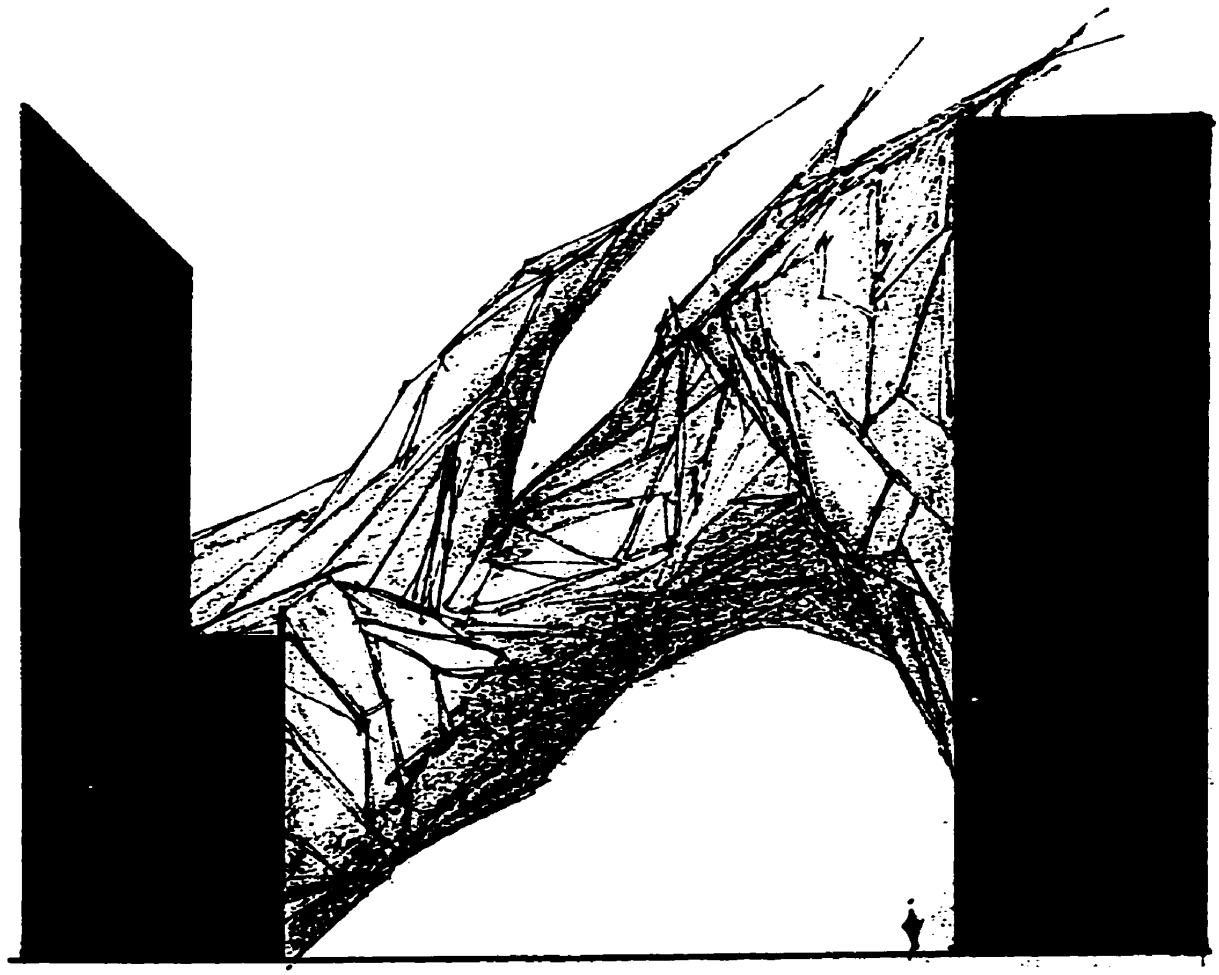


Figure 73. Linear Bedaub - Spatial Borders

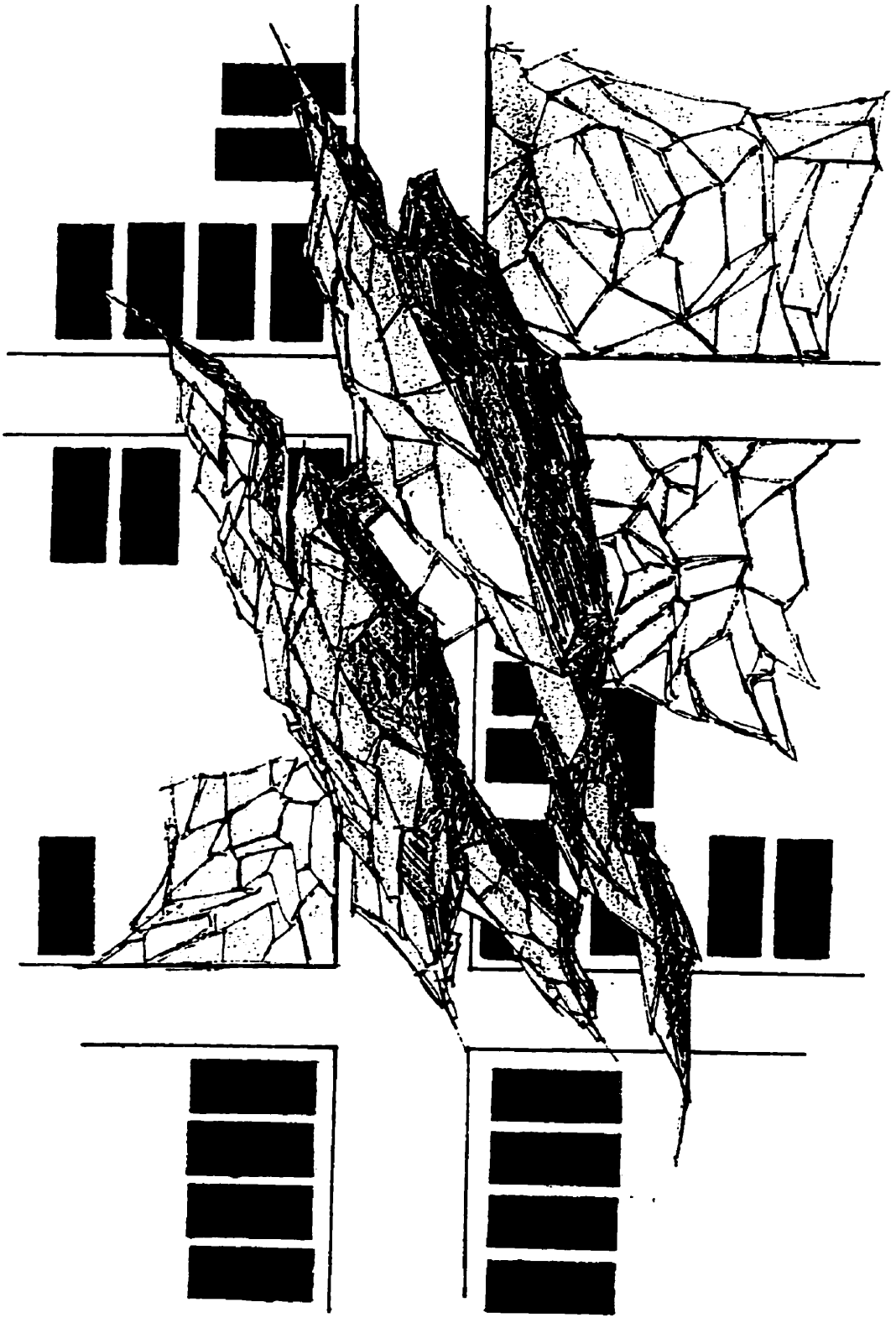


Figure 74. Linear Bedaub - Spatial Borders Detail

Linear Bedaub

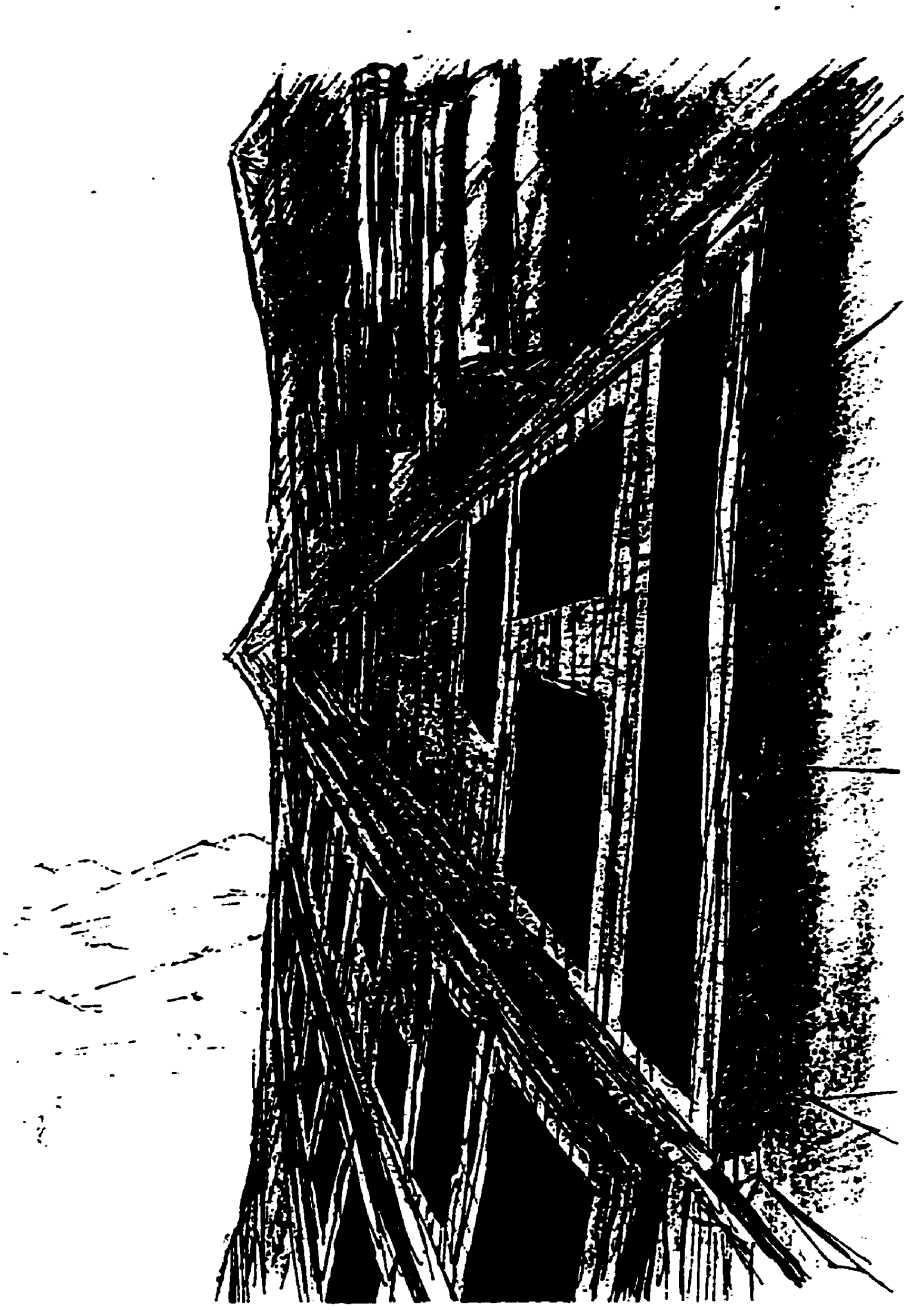


Figure 75. Linear Bedaub - Spatial Borders Detail

6.6 Artefact: A Multilingual Centre

This section describes the intervention as it informs the development of urban form and artefact. This section illustrates the author's interpretation of the meaning of independence and particularly what it means for the fabric and culture of Tashkent.

6.6.1 The Non-Signifying Object

Form will not be laden with values emerging from either a state ideology or a foreign ideology. The urban artefact will be empty of value and meaning until meaning is attributed to it. The new urban artefact will be found and not created. Form will be captured, modified and personalised. The urbanite will come to recognise form as alingual until a function occurs within that form. Initial form will not follow function, nor will form inherently carry social or cultural value. Function will come to modify form, as value will come to inhabit form. The urban artefact will not start out as a signifier. It will be the non-signifying object. In time objects will become artefacts and the artefacts together will form the new urban fabric.

Pre-existing artefacts will be reused. The built artefact as signifier will be modified to change its signification. As with the non-signifying object, pre-existing signifiers will have to grow into their new meaning. The personalisation of artefact that must occur in order to make the connection to the signified will occur through the individual manipulation and articulation of artefact and space. For pre-existing artefacts it is impossible to return to a state of 'objectness'. So the transformation must move forward. The democratisation of space (and artefact) will mean residents in Soviet style apartment blocks freely customising the interior as well as the exterior of their homes. The factory will be reused and articulated to function as a hospital. The park or the square will be filled in with built form and function as a centre for commercial exchange.

6.6.2 Artefact Bedaub

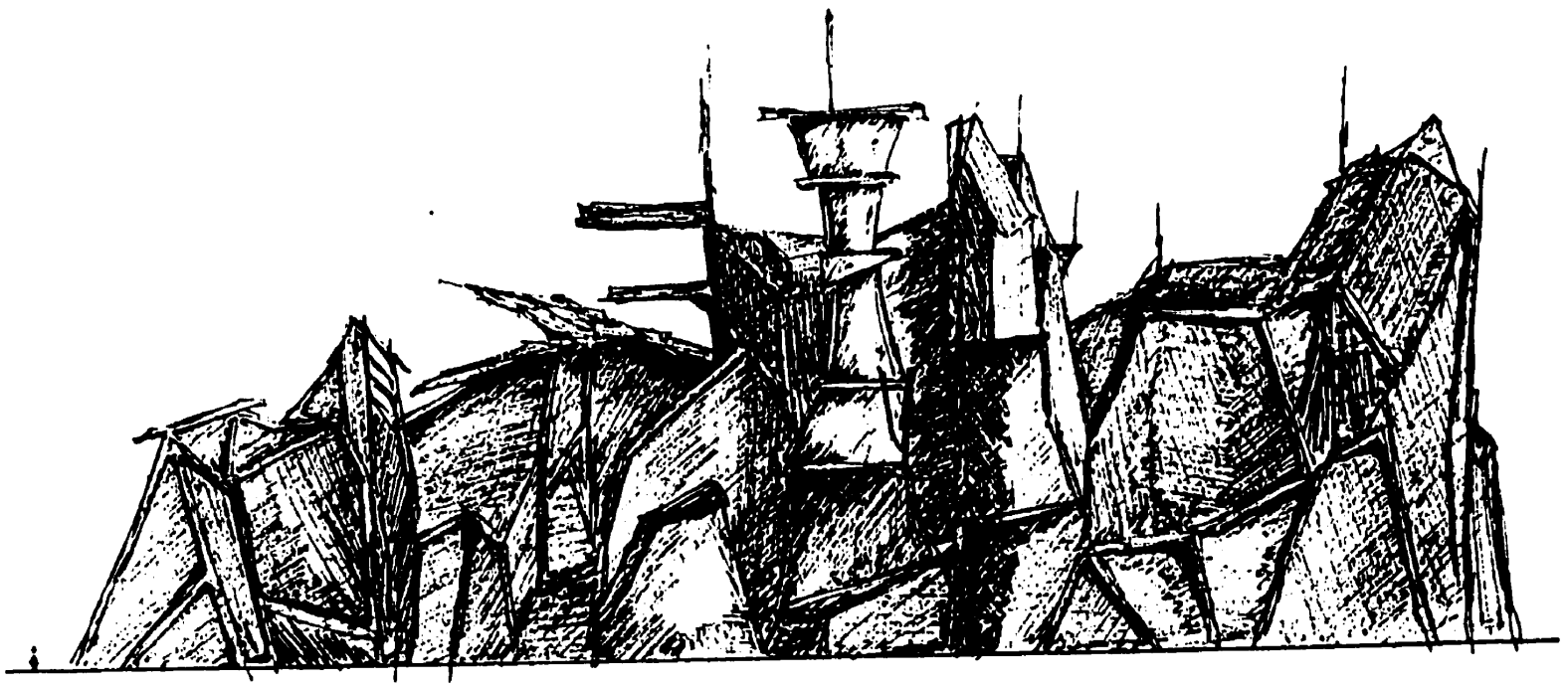


Figure 76. Artefact Bedaub - The Catalyst

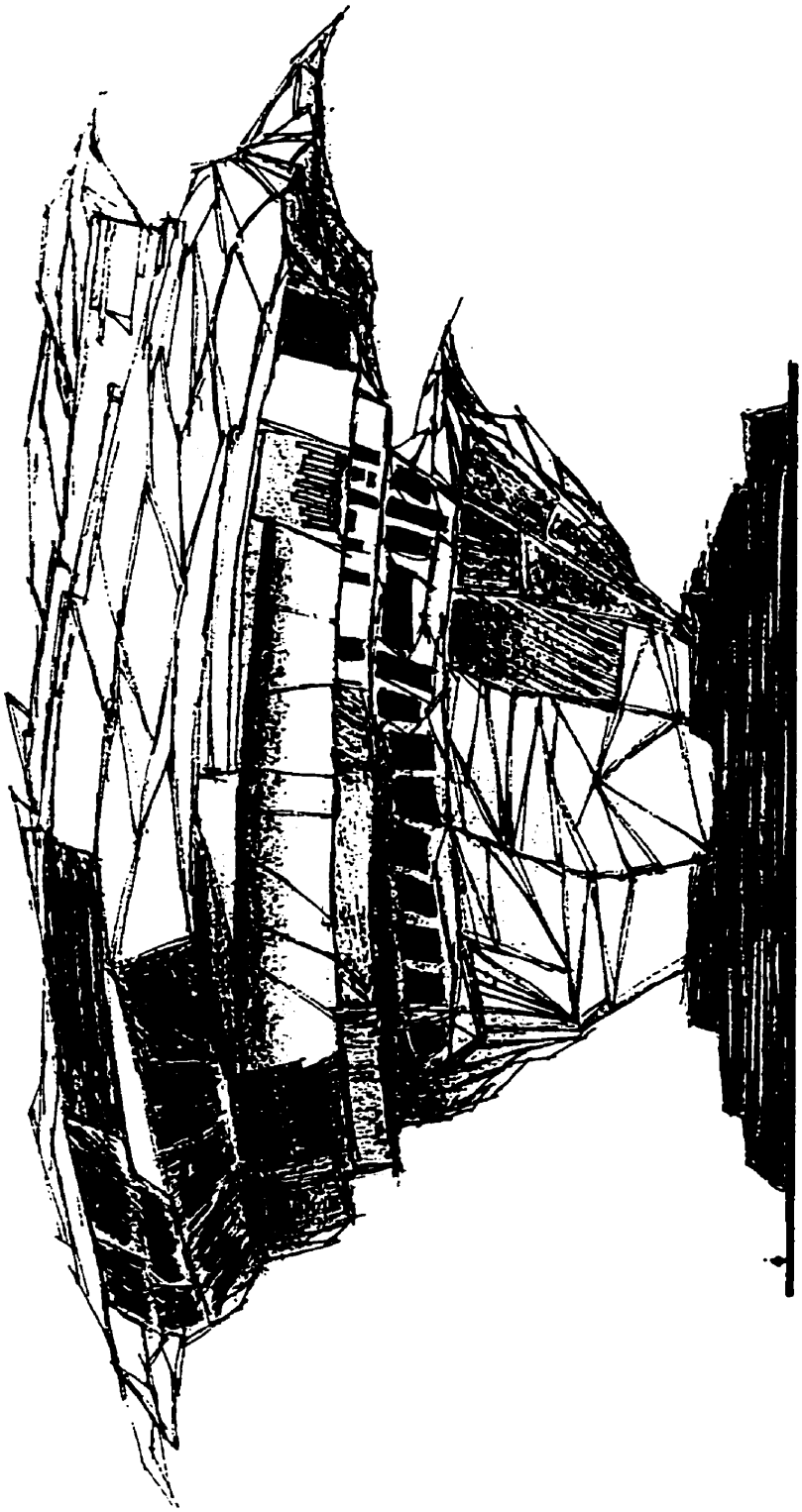


Figure 77. Artefact Bedaub - The Catalyst

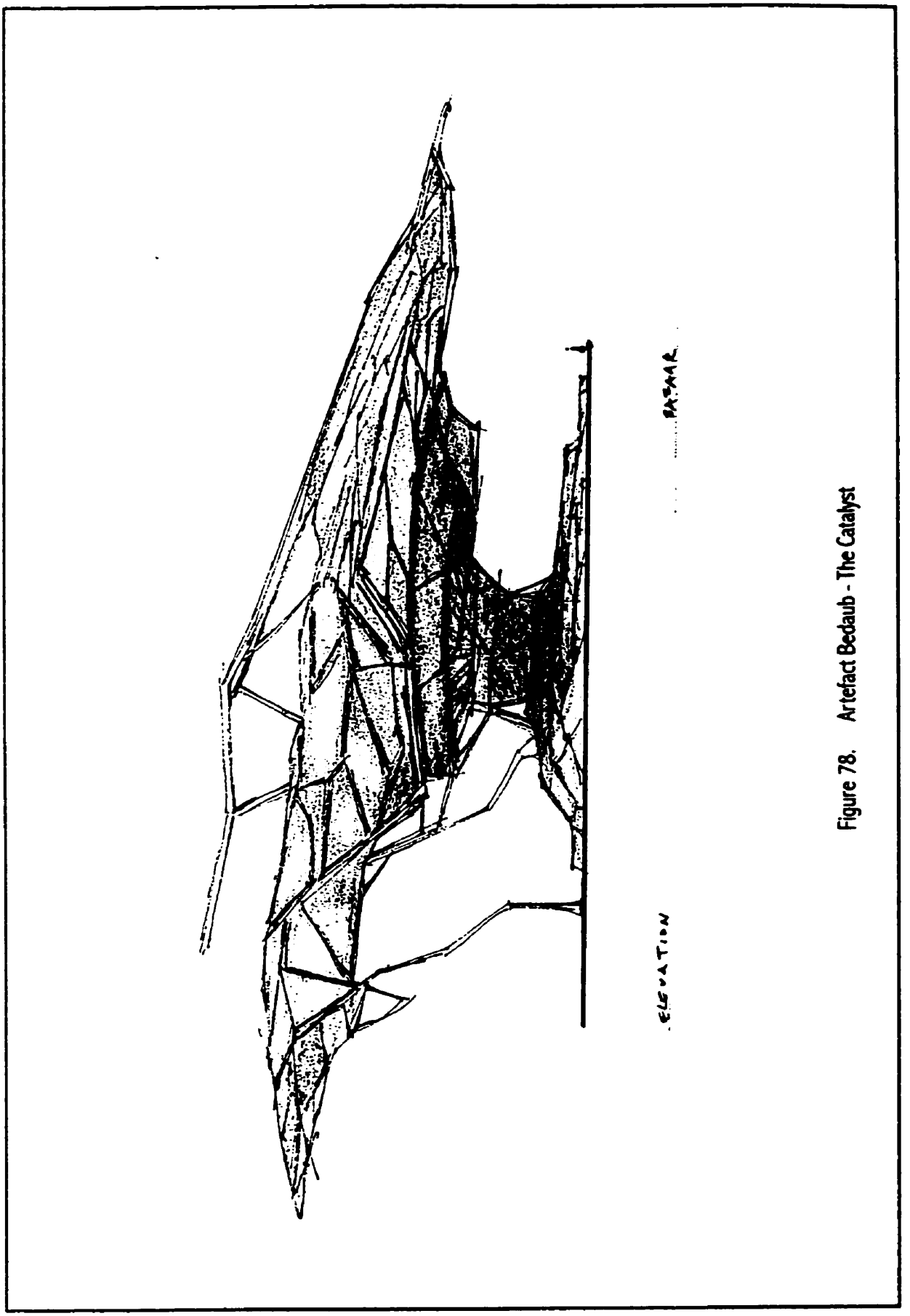


Figure 78. Artefact Bedaub - The Catalyst

6.6.3 Manifesto

Manifesto

Communication renders a culture vulnerable.

Communication will act upon or act on behalf of culture.

Meaning interacts with culture to allow growth.

Meaning is arbitrary.

Traditions deceive.

Traditions will not be separated from context.

Change reduces values.

Change exposes order.

Independence is nostalgic.

Independence signifies nothing.

Methods evaluate the investigator.

Methods will be significant.

Interpretation is inherently biased.

Interpretation is a form of hegemony.

Ideology reduces the individual.

Ideology transgresses history.

Identity is temporary.

Identity is meaningful.

7. Summary

This study is an apparatus. It has developed a basis for performing the empirical as well as literary research that enables it to contribute to a select body of work concerning the semiotic analysis and design of urban space in cultures of transition. The issue of transitional culture brings with it a body of related interests that have either been partially touched on in this study or dealt with in relative depth. The issue of semiology is dealt with in depth. It enriches the reader's knowledge concerning the various aspects and branches of analysis with the field of semiotics as it concern the urban or built environment. The idea of culture and foreign hegemony is dealt with in the formal structure of a case study, revealing information regarding the initial development of Tashkent, the introduction of a foreign culture, the suppression and transformation of Uzbek Tashkent, and the current state of independence and post hegemony. As an apparatus this study works to inform the reader on two levels, semiotics and the case of Tashkent. It also works on a third level in the form of the Intervention. The intervention does not inform the reader; rather it requires the reader to inform. That is the Intervention is meant to challenge the reader by offering a proposal for future architectural and urban spatial development that may be considered radical, but that prompts the reader to address the issues that have been raised by this study.

This is by no means a completed work. In order for this document to be understood by the readers for what it is contributing to the fields of urban design and semiology, this document must be read as only a part of a much larger process. This work introduces the ideas of semiology, urban design and place making, but is not a completed work on the subject. However as this introduction to these subjects, this document plays an important initial role in further study.

The study employed a means of semiotic analysis that was based in the theory established by the semiotician Ferdinand De Saussure. As such a dyadic relationship between the signifier and the signified is established. It is recognised by the author of this document that the same case study can be undertaken using a triadic relationship like that proposed by Peirce. By using the triadic format for semiological analysis the investigator introduces a component known as the interpretant, which may be argued contributes to a more dialogic understanding of urban semiotics. Undertaking this variation on this case study is recognised as potentially carrying with it a level of dialogic interpretation that may reveal qualities

of the case study's urban semiosis that are critical to urban identity, particularly from the point of view from of urban design and place making.

Additionally this author understands that the triadic format of analysis can contribute to this analysis in another way, perhaps changing the focus but once again adding depth to the case study and the methods used in the case study analysis. This depth comes from the combination of semiotic analyses. That is, this author proposes that the same case study could receive analysis using two types of semiotic analysis, both the triadic and the dyadic, simultaneously, as means of understanding the Tashkent case study. In doing so it is likely that results gathered from the analysis would differ for the two formats, and as a result the case study itself could be used as a means of evaluating the two semiotic formats.

The analysis and intervention (based on the results of that analysis) used in this study are singular. That is, the Saussurian format of semiotic analysis was used, and consequently the intervention can be considered limited to some extent. The intervention proposes meaningless space and the non-signifying object as a means of allowing Tashkent's transitional culture to freely express itself. While it is generally understood amongst most semioticians that the non-signifying object is an impossibility, this author recognises this obstacle and addresses it in the urban design as merely one investigator's starting point for further thought.

In the course of completing this document, it became evident that there in fact are other works currently being undertaken by members of other streams of academia. With this in mind, the author of this document realises that this work could perhaps come to fruition as merely a component to a greater work. A conglomeration of semioticians, planners, literary analysts and so forth could potentially all be assembled to contribute their understanding of the case study as a collective. In doing so, not only would this work find a place to contribute to a larger dialectic, but also find a forum for an analysis that may be able to critically evaluate the role of this form of analysis in this kind of case study.

Baring this kind of evaluation, this author is charged with placing this document within the realm of semiotics, planning, place making and urban design, for the contributions that it has made. In its current state this document performs a semiotic analysis of a transitional culture's urban space. The analysis demonstrates an application of Saussurian semiotics that privileges the dyadic relationship between the signifier and the signified. The results of this analysis shaped the thoughts of the author and consequently

the format and theory behind the intervention. As such this document provides an analysis of a transitional culture, an intervention based on Saussurian semiotics, and the initial stages of further study, both into urban semiotics and into the case study.

If further research is to be carried out within the case study provided in this work, the author suggests that other formats of semiotic analysis are used, and additionally, that researchers from other fields of interest such as literature, are included.

8. Bibliography

Works Cited In Proposal

Chandler D, 2000, *Semiotics for Beginners* (wysiwyg://9http://www.aber.ac.uk/-gdc/semo01.html)

Danesi M, Perron P, 1999, *Analyzing Cultures: An Introduction & Handbook* (University of Indiana Press, Indiana)

Gottdiener M, 1986, "Culture, Ideology, and the Sign of the City", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Silverman H, 1999, *Cultural Semiosis: Tracing the Signifier* (Routledge, New York)

General Works Cited

Abel C, 1980, "Meaning and Rationality in Design", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Agrest D, and Gandelsonas M, 1996, "Semiotics and Architecture: Ideological Consumption or Theoretical Work", in *Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Appleyard D, 1979, "The Environment as a Social Symbol: Within a Theory of Environmental Action and Perception", *Journal of The American Planning Association* April pp 143-153

Barry J, 1999, *Art, Culture, and the Semiotics of Meaning: Culture's Changing Signs of Life in Poetry, Drama, Painting and Sculpture* (St. Martin's Press, New York)

Barthes R, 1986, "Semiology and the Urban", in *The City and the Sign* Eds M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Betchel B, 1980, "Architectural Space and Semantic Space: should the twain try to meet?", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Biddulph M, 1995, "The Value of Manipulating Meanings in Urban Design and Architecture", *Environment and Planning B: Planning and Design* 22 pp 739-762

Blau J, 1980, "A Framework of Meaning in Architecture", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Bonta J, 1980, "Notes for a Theory of Meaning in Design", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Boudon P, 1986, "Re-writing of a City: The Medina of Tunis", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Broadbent G, 1980, "A Semiotic Programme for Architectural Psychology", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Broadbent G, 1980, "The Deep Structures of Architecture", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Broadbent G, 1980, "Building Design as an Iconic Sign System", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Broadbent G, *1983*, "Architects and Their Symbols", in *Remaking the City: SocialScience Perspectives on Urban Design* Eds. J. Pipkin, M. La Gory, J. Blau, (State University of New York Press, Albany)

Broadbent G, 1990, *Emerging Concepts in Urban Space Design* (Van Nostrand Reinhold, New York)

Broadbent G, *1996*, "The Plain Man's Guide to the Theory of Signs in Architecture", in *Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Cacciari M, 1991, "Naples: The Porous City", *Alphabet City, Open City* 6 pp 28-43

Canter D, Tagg S, 1980, "The Empirical Classification of Building Aspects and Their Attributes", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Choay F, 1986, "Urbanism and Semiology", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Deely J, 1990, *Basics of Semiotics* (University of Indiana Press, Indiana)

De Long A J, 1980, "Coding Behaviour and Levels of Cultural Integration: Synchronic and Diachronic Adaptive Mechanisms in Human Behaviour", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Derrida J, 1991, "Generations of a City", *Alphabet City, Open City* 6 pp 12-27

De Ventos X R, 1980, "The Sociology of Semiology", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Eco U, 1980, "Function and Sign: Semiotics of Architecture", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Eisenman P, 1996, "Architecture and the Problem of the Rhetorical Figure", in *Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Ellin N, 1996, *Postmodern Urbanism* (Blackwell Publishers, Cambridge, Massachusetts)

Fauque R, 1986, "For a New Semiological Approach to the City", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Garroni E, 1980, "The Language of Architecture", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Gottdiener M, 1983, "Urban Semiotics", *in Remaking the City: Social Science Perspectives on Urban Design* Eds. J. Pipkin, M. La Gory, J. Blau, (State University of New York Press, Albany)

Gottdiener M, 1985, *The Social Reproduction of Urban Space* (University of Texas Press, Austin)

Gottdiener M, 1986, "Culture, Ideology, and the Sign of the City", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Greimas A, 1986, "For a Topological Semiotics", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Harries K, 1988, "Representation and Re-Representation in Architecture", *VIA Journal of The Graduate School of Fine Arts* 9 pp 13-26

Harrison J D, 1980, "The Role of Meaning in the Urban Image", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Herschberger R G, 1980, "A Study of Meaning and Architecture", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Jackson A, 1995, *Restructuring Architecture for the Twenty-First Century* (University of Toronto Press, Toronto)

Jenks C, 1980, "The Architectural Sign", in *Signs, Symbols and Architecture* Eds. G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

King G, 1996, *Mapping Reality* (St. Martin's Press, New York)

Koolhas R, 1996, "Toward the Contemporary City", *in Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Krampen M, 1980, "The Correlation of Objective Façade Measurements with Subjective Ratings", in *Meaning and Behaviour in the Built Environment* Eds. G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Lagopoulos A, 1986, "Semiotic Urban Models and Modes of Production: A Socio-Semiotic Approach", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Lagopoulos A, 1986, "Semiological Urbanism: An Analysis of the Traditional Western Sudanese Settlement", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

La Gory M, 1983, "The Social Consequences of Spatial Structure", in
Remaking the City: Social Science Perspectives on Urban Design Eds. J. Pipkin, M. La Gory, J. Blau, (State University of New York Press, Albany)

Ledrut R, 1986, "Speech and the Silence of the City", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Ledrut R, 1986, "Images of the City", in *The City and the Sign* Eds. M. Gottdiener, A. Lagopoulos, (Columbia University Press, New York)

Lowenthal D, and M. Riel, 1980, "The Nature of Perceived and Imagined Environments", in *Meaning and Behaviour in the Built Environment* Eds G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Lynch K, 1981, *Good City Form* (MIT Press, Cambridge, Massachusetts)

Pipkin J, 1983, "Structuralism and the Uses of Cognitive Images in Urban Planning", in
Remaking the City: Social Science Perspectives on Urban Design Eds J. Pipkin, M. La Gory, J. Blau, (State University of New York Press, Albany)

Preziosi D, 1979, *The Semiotics of the Built Environment: An Introduction to Architectonic Analysis* (Indiana University Press, Bloomington)

Preziosi D, 1979, *The Origins of the Built World and its Semiotic Organisation* (Mouton Publishers, New York)

Rowe C, and Koetter F, 1996, "Collage City", in *Theorising A New Agenda For Architecture:An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Rowland K, 1965, *The Shapes We Need (Ginn & Company, London)*

Sassen S, 1991, "Cities in the Global Economy", *Alphabet City, Open City* 6 pp 172-177

Scalvini M, 1980, "Structural Linguistics versus the Semiotics of Literature: Alternative Models for Architectural Criticism", in *Signs, Symbols and Architecture* Eds G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Schumacher T, 1996, "Contextualism: Urban Ideals and Deformations", in
Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995 Ed K. Nesbitt (Princeton Architectural Press, New York)

Schwirian K, 1983, "Urban Spatial Arrangements as Reflections of Social Reality", in
Remaking the City: Social Science Perspectives on Urban Design Eds J. Pipkin, M. La Gory, J. Blau, (State University of New York Press, Albany)

Stringer P, 1980, "The Meaning of Alternative Future Environments for Individuals", in
Meaning and Behaviour in the Built Environment Eds G. Broadbent, T. Llorens (The Pitman Press, Bath, Avon)

Taborsky E, 1998, *Architectonics of Semiosis* (St. Martin's Press, New York)

Tschumi B, 1996, "Architecture and Limits I", in *Theorising A New Agenda ForArchitecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Tschumi B, 1996, "Architecture and Limits II", in *Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Tschumi B, 1996, "Architecture and Limits III", in *Theorising A New Agenda For Architecture: An Anthology of Architectural Theory 1965-1995* Ed K. Nesbitt (Princeton Architectural Press, New York)

Tudela F, 1980, "An Introduction to Italian Developments in Architectural Semiotics", in *Signs, Symbols and Architecture* Eds G. Broadbent, R. Bunt, C. Jenks (John Wiley & Sons, New York)

Venturi R, Brown D, Izenour S, 1998, *Learning From Las Vegas: The Forgotten Symbolism of Architectural Form* (The MIT Press, Cambridge, Massachusetts)