

Person Perception in Daydreaming
A Descriptive Study

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PERSON PERCEPTION IN DAYDREAMING:
A DESCRIPTIVE STUDY

BY

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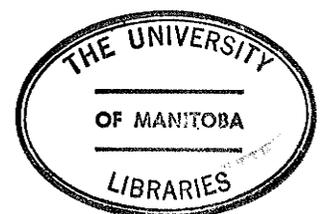
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Abstract

Daydreaming may be considered "any shift of attention from an ongoing mental or physical task, or from a perceptual response to external stimuli towards a response to some internal stimuli" and its content is largely of a practical and interpersonal nature. To examine dimensions of person perception in daydreaming 56 summer students at the University of Manitoba kept daydream journals, completed a subset of the Imaginal Processes Inventory and wrote descriptions of people. Ideas in the Free Descriptions and in Daydreams were classified according to a scheme adapted from previous research. Chi-square tests of association were performed to examine associations between pattern of category use and the age, sex and daydream style of the subjects. Category use was also compared for the two conditions. Significant relationships of limited strength were found in all cases. Daydreaming was discussed within the context of research into consciousness.

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Introduction

1

It is a truism that people often overlook that which is most familiar and near to them while pursuing more distant goals. Consider daydreaming, those intrusions on an ongoing physical or mental activity that virtually everyone experiences at some time. These very private experiences have for some time received only cursory attention at best, and more often than not have been dismissed both in the public and professional minds as no more than "castles in Spain", "wool-gathering" or the idle mindwandering of people unsatisfied with their lot. The terms fantasy and daydreaming have typically been used interchangeably but more recent research indicates that wish fulfillment is only one facet of daydreaming, which can also include planning, organization, reminiscing, pondering and other forms of thought. Speculation about the nature and function of daydreaming has moved from one pole to the other: from wish fulfillment and unconscious impulses to baseline cognitive processing. Much of what is processed in daydreams appears to be of an interpersonal nature and the purpose of this study will be to examine this more closely for indications of what particular aspects of other people the daydreamer attends to.

Background

Examination of the phenomenon of daydreaming has taken place in at least two phases. Initially it was considered within the realm of psychoanalytic thought as a cousin of night - dreaming and was therefore understood in terms of wish fulfillment and the emergence of unconscious impulses. As early as the 1920's Varendonck(1921) was giving daydreaming particular atten-

tion. It was considered to be highly determined by affective impulses which brought forth unresolved problems, worries and striking impression. According to his observations daydreaming was qualitatively similar among normals and neurotics, but a distinction could be made according to the degree of reality contact. While the daydreams of normal individuals concerned themselves with largely practical matters, those of neurotics were characterized by brooding, fantasy-like thought and some difficulty in controlling the onset and duration of these episodes. There was a widespread implication in the field as a whole that daydreaming was not common among healthy individuals, an impression no doubt aided by Freud's pronouncement that happy people never have fantasies. Research continued in this vein until the late 1950's and early 60's with the advent of a revised approach and the beginnings of a more systematic and normative examination.

Singer and McCraven(1961) recognized the need to collect data from a wider variety of sources than the largely personal accounts of the previous theorists themselves. The exploratory study quickly cast doubt on the rather narrow view of daydreaming which had prevailed to that time. In answer to the questionnaire, 96% of the subjects (summer students at a U.S. teachers' college) reported at least some daydreaming. Eighty percent reported that practical, immediate concerns were frequently dealt with, while a slightly larger percentage included private and interpersonal matters. The conclusion that the authors arrived at was that daydreaming seemed largely a matter of interpersonal problem-solving within a relatively limited time frame

and dealt with fairly concrete concerns. It was also found that for the most part, daydreaming was considered an enjoyable activity.

Singer and several colleagues continued their work and in doing so both broadened the scope of daydreaming and specified its nature more clearly. Within a few years Singer had defined daydreaming as follows: "any shift of attention from an ongoing physical or mental task, or from a perceptual response to external stimuli towards a response to some internal stimuli" (Singer, 1966, p.3). This seems to capture the essence of the process without specifying and thereby restricting the exact content. Examples of content gathered in the first study (Singer and McCraven, 1961) included planning steps to be taken at work, imagining oneself in a warm relationship, imagining oneself as a more effective person, thinking back to a previous event and others in this vein.

In the search for correlates of daydreaming the relationship between this activity and psychopathology began to be clarified somewhat. In their original study Singer and McCraven had discovered that frequent daydreaming was associated with fantasy wishful thinking and with anxiety. A cluster of variables found by Singer and Schonbar (1961) to correlate with daydreaming included night-dream recall, creativity, social introversion, the need for achievement and closeness to mother. In a later factor analytic study Singer and Antrobus (1963) found that neuroticism and emotional instability had high loadings of repetitive daydreaming, absorption in daydreams and the presence of auditory imagery. Furthermore, there was a lack of content variety and

especially of planning or of future-oriented thinking. Although not stated outright, this implied a relatively higher proportion of wishful, improbable and perhaps ruminative thought in neurotics. In the end, daydreaming emerged as a bipolar phenomenon with one pole characterized by controlled, objective, "tough-minded introversive" thought in contrast to another large cluster of factors which included distractibility, the presence of strong negative affect, poorly organized thinking and an anxiety-neurotic pattern of traits. Somewhere in the latter cluster was a positive attitude to and an acceptance of daydreaming which was different in an unspecified way from the opposite pole.

This mixture of positive and negative elements lent partial justification to the prevailing belief that daydreaming was an unprofitable and unproductive activity engaged in by individuals who were not entirely satisfied and perhaps not entirely competent to deal with the world. What they could not accomplish through active operating was manipulated into a success in the privacy of their own minds. Wagman(1968) noted that frequent daydreaming among college students was associated with lower academic achievement, which seemed to further substantiate this belief. At the same time, however, it was becoming clear that daydreaming was neither a uniform phenomenon nor was it uniformly negative. If anything, it was a complex thing with many facets requiring careful study: frequency of occurrence, content, repetition, imagery type, attitude to it and associated characteristics.

It was not surprising, therefore, that several patterns of daydreaming began to emerge. Differences among American sub-

cultural groups (Singer and McCraven,1962) suggested that the influence of both one's personal background and of present circumstances. Those cultural groups well established in North America daydreamed less frequently than those more recently arrived or still climbing the socio-economic ladder. The specific content for each sub-group also varied, but not in an obvious relationship to the overall pattern, perhaps attesting once again to the complexity of daydreaming.

Over the years dozens of daydreaming scales were administered and subjected to factor analysis, culminating in the development of the Imaginal Processes Inventory by Singer and Antrobus(1972). In their normative study the authors used the Inventory in conjunction with other personality measures and found that people fell into three categories: (1) those who tend to be distractable, worried, absorbed in their daydreams, who have a poor sense of well-being, a high degree of anxiety and who are prone to mindwandering; (2) people experiencing much tortured self-doubt, ruminating about ethical considerations, fantasizing about achievement, failure and heroism and who generally have fleeting, negatively toned daydreams; and finally (3) people who acknowledge frequent, vivid and absorbing daydreams or at least general reflectiveness, who have a positive attitude towards this activity, demonstrate considerable interpersonal curiosity, a high rate of mental activity and a preference for ideational pursuits. Their daydreams tended to be future-oriented. Further replication and refinement has taken place (Giambra,1977; Huba,Segal and Singer,1977) so that the Inventory is becoming established as a reliable

and interpretable research instrument (Huba,1980) and the patterns emerging from its use appear relatively stable.

Singer and Antrobus(1972) noted the similarity of these groupings to patterns of pathological and personality classification developed over the years. Group 1 resembles the anxiety-hysterical syndrome and the factor corresponding to it is referred to as Neurotic-Anxious Absorption in Daydreaming. Group 2 shows the "classical superego conflict pattern"(p.200) of the Obsessional Neurotic style. The third pattern contrasts with the Social Extroversion factor and is therefore suggestive of the true Thinking Introvert of Jung's formulations. Although factor names have been changed somewhat in the later works (Huba,Segal and Singer,1977), the pattern remains essentially the same. The major change is that the factor representing the neurotic-like pattern has been renamed Attentional Control and includes components from both the Mindwandering-Distractibility scale and the Intense Positive Mental Involvement scale. The reasons for this change and its interpretation have not yet been addressed.

Following the pioneering efforts to broaden the approach to daydreaming in the 1960's research of the past decade has continued in several directions. Work has been done to refine normative data and to discover personality correlates (e.g.Singer and Pope,1978;Frazier,1975;Haritan and Singer,1974). Giambra (1973) investigated how daydreaming patterns change with age in males. Contrary to popular belief, the elderly do not spend more time daydreaming than do others. In fact, the pattern was the reverse of that with the highest incidence being among

men aged 17-25, and declined gradually to the 66-77 range. Even so, the elderly subjects reported that daydreaming occurred at least several times daily. The most frequently encountered content categories among the high-frequency young adult group reflected the concerns and preoccupations of that time of life : promotion, meeting parental expectations, general concern with the present, thoughts of day-to-day details, reliving happy and exciting events as well as the usual fare of heroic and utterly impossible feats. The elderly group was also highly concerned with current problems, a finding not surprising among people whose daily existence and role in life are not stable or comfortable. The middle-aged part of the sample had moderate ratings for each of the categories described here except for sharing with the youngest group a strong tendency to think about day-to-day details, perhaps related to their responsibilities as family members and as established members of some occupational field.

The study of physiological correlates, although in a relatively primitive state, is providing interesting results. In contrast to the rapid eye movement associated with night-dreaming, Singer and colleagues (in an unpublished report summarized in Singer, 1974) hypothesized that daydreaming would occur with minimal eye movement in order to reduce the amount of visual stimulation which would otherwise compete with internal cues for processing or "channel space". This was confirmed in the study and supported by another investigation by Klinger, Gregoire and Barta (1973). Marks (1972) noted that good visualizers made fewer eye movements when processing visual information in

daydreams than did poor visualizers. He further suggested that a person learns to suppress incoming visual stimulation from external sources in order to engage in fantasy with a visual component, reasoning that the actual processing would have to take place in the same area of the brain. The supply of data, therefore, had to be the key to attending to competing stimulation. Singer, Greenberg and Antrobus(1971) studied this issue by providing stimulation which would trigger a visual tracking reflex that a daydreamer would have to block out somehow. During periods of daydream processing they noted reduced ocular motility but this was not the case when a subject was occupied with problem-solving or suppression. When special lenses were used to put the images out of focus there were fewer reports of daydreams among men, but not among women. Although the issue needs more work, it was suggested that the key element is one of differing mechanisms used to control eye movement during the daydream. That is to say, the area of the brain at which eye movement was interfered with by this procedure was not the same for men as for women. No other specific findings concerning heart rate, GSR or other physiological measures have emerged in connection with daydreaming, but more research is needed.

We may also note in passing that work continues in the study of imaginative activity in children in an effort to learn more about the origins and development of daydreaming. Notable studies are by Singer and Singer(1973,1974) and by Freyberg(1973).

Nature and Function of Daydreaming

Daydreaming has tended to be overshadowed by one of its more interesting components, namely fantasy. This is perhaps

the reason that, until quite recently, daydreaming has remained within the realm of psychodynamic thought and has usually been considered a pale imitation of night-dreaming. According to this formulation night-dreams and fantasy share a common origin in the inner impulses of the individual and are made suitable for expression by the ego's defensive mechanisms. Their content is often of a wishful nature, ranging from reasonably likely events to the wildly improbable. Moving away from such restrictive bounds Singer and his colleagues examined the whole spectrum of ideation which is daydreaming without being hampered by orthodox preconceptions. They believed from the beginning that daydreaming would emerge as an autonomous ego function in the manner of memory, perception and cognition. The high rate of daydreaming among normal groups and the prevalence of practical, planful thinking added to the impression that these were positive features worth investigating.

Among the initial studies (Singer and McCraven, 1961; Singer and Schonbar, 1961) correlations had been found between daydreaming and measures of creativity, as well as with the production of human movement or "M" responses on a Rorschach record. In the psychodynamic view this meant awareness of unconscious impulses and an ability to integrate them with the demands of reality for outward expression. An important consideration here is that any well-functioning individual can delay physical gratification by checking bodily movement in favour of what Freud called "experimental action" in the mind. The individual takes into account environmental circumstances, his own limitations and the demands of the superego before acting on his im-

pulses. This requires sensitivity to one's inner processes and is likely to encompass other people as well. This is especially true for the creative individual since people, their lives and emotions are the raw material of the creative process, not just the background to the mechanics of expression. Such self-awareness and empathy are suggested by the significant presence of human movement on the response record (Klopfer, 1954). One may also expect to find intellectual ability, socially appropriate behaviour and a tendency to be introspective (Singer, 1960). Freud linked introspectiveness to fantasy production and suggested that "experimental action" is also an alternative to somaticization and repression. There is some evidence for this in scores on the Welsh Repression Scale in the Singer and Schonbar study. It should also be noted, however, that excessive introversion could lead to an unadaptive pattern of ruminative, unpleasant thoughts. As is so often the case, the mere presence of a trait or behaviour is not an unreservedly positive or negative sign but must be considered in detail and within the larger context.

This mental juggling of problems and solutions prompted Singer and Rowe (1962) to comment on the recurrent finding that daydreaming and anxiety are related. They suggested that such activity "makes one smaller in the face of multiple possibilities". Whether this means alertness and very active processing of alternatives or a feeling of being overwhelmed by and inadequate to the task is not clear, but could prove an engaging avenue of research.

Several investigators have pursued the question of function more directly. Antrobus and Singer(1964) found that when given a visual detection tasks subjects who were told to verbalize task-irrelevant ideation (equivalent to daydreaming) were less irritable, less drowsy and consequently made fewer errors than those who had only been permitted to count out loud for the 90 minute sessions. The relationship, however, was not a simple one. While maintaining alertness under conditions of reduced external stimulation, perhaps by providing stimulus variety from within, this same daydreaming interfered with accurate perception and processing of information when the number and rate of stimuli were increased to make the task more difficult.

In a somewhat contrasting vein Singer and Rowe(1962) examined the question of fantasy as an arousal-reducing mechanism, following in the footsteps of Freud and others (e.g.Feshbach,1955). When testing this question with respect to anxiety they were unsuccessful but a later attempt by Rowe(1967) did show that the opportunity to daydream before the onset of an expected shock reduced aversive arousal, especially for those subjects with a predisposition for daydreaming. This latter group was, in fact, less aroused overall though it is not possible to assume that daydreaming played a causal role here. It should also be noted that this experiment involved induced, state-dependant anxiety and that the results may have been different with a group whose anxiety was a more enduring trait. Anger and aggression produces more complex results in a study by Pytkowicz, Wagner and Sarason(1967) in which some subjects were given the opportunity to daydream or to produce a TAT sto-

ry after receiving an insult from the experimenter. Although the level of anger for these subjects diminished, a measure of aggression showed no such decrease but a tendency to be directed inward. A study by Paton(1972) produced a similar reduction in arousal level. Pytkowicz et al. concluded that their results cast doubt on Freud's contention that fantasy acts as a drive-reducing mechanism. Instead, they said that the individual is able to work out resolutions to a problem, thereby changing his mood but not actually reducing the amount of drive energy in the system.

Daydreaming then can be used in a constructive manner by some individuals to alter an aversive mood state. It would be instructive to examine this process more closely. Alternatively, of course, one could use pleasant thoughts to avoid dealing with certain demands. In any case, the matter is not a simple one.

Some light may be shed on the nature of daydreaming and its function by considering research and discussion concerning the fantasy component. Klinger(1971), who distinguishes fantasy from daydreaming largely by excluding effortful problem-solving from the former category, traces the attempts to discern the functions of fantasy and of play. He comments that it is difficult to imagine how such a prominent activity as play could be without an adaptive purpose. These two activities are related according to some theorists and, in fact, the terms are used interchangeably in reference to children under the age of three. Whether one proceeds from the other or they begin as a single entity but split later is still unclear and systematic

research is as yet incomplete or inconclusive.

One defining characteristic of play is that the behaviours involved would normally be instrumental, but in this case are practised without the demands of truly attaining the usual goal. Another feature is that materials and situations are used as if they had properties which in fact they do not possess. Another way of describing play, according to Piaget's formulations is to speak of the adaptation of old schemata to new and different situations. This imaginative play can be largely indistinguishable from fantasy up to the age of three, after which the former becomes increasingly structured and rule-bound. The period of greatest fantasy production begins to wane by the age of five and as the child develops further both play and fantasy imitate reality more and more. By the adolescent years, although less frequent than previously, fantasy has almost replaced play as though it were an internalized form of the latter. Its content becomes heavily concentrated on the problems of daily living such as vocation, education and, especially among adolescents, issues of heterosexuality. Such practical concerns continue to dominate in the adult phase of gradually diminishing daydreaming.

Research has indicated that overall, play and fantasy are very similar in their tendency to focus on current, unsolved problems, unfinished tasks, role conflicts and the processing of affective material. There is no hard evidence that fantasy is in fact problem-solving. While the evidence regarding play is somewhat stronger, it is not enough to allow the conclusion

that problem-solving is the defining function of play. At most, says Klinger, one could say that play is one arena for problem-solving although an individual usually goes about a solution more directly. Freud's position did not address the problem-solving aspect but regarded fantasy as an outlet for drives, distorted and rendered acceptable by defense mechanisms, and was applied to play also. If, however, the pleasure principle was to form the basis for this and other processes, then why did both play and fantasy often involve the reenactment of painful and anxiety-laden events? Freud puzzled over this for some time but was finally able to integrate the work of Groos(1901) who had suggested that children engage in play because such manipulation of the environment imbued them with a sense of being an "efficient cause". This formulation could fit the pleasure principle but was not without imperfections. Eventually Freud made revisions in his theory and concluded (1920) that children played their often repetitive games in order to assimilate events with a strong emotional component gradually, perhaps focusing on a different aspect each time or slowly approximating the full impact of the event.

At about this time the drive-based theories of motivation were coming to the fore. They regarded behaviour as arising out of some need felt by the organism. Primary needs for survival such as hunger, thirst and the need for sexual activity were believed to be especially powerful as motivators. Behaviour such as play which served no such organic need was thought to be motivated by an affect or other experiences which had become associated with the primary drives. These theories, how-

ever, were not entirely satisfactory in explaining either play or learning in general and the complexities of these areas sparked much research and controversy.

In a review of developments of his time White(1959) discussed some of the difficulties encountered in various areas of psychology. He noted the latent learning phenomenon first found in animal studies, whereby an organism seemed to have learned about its environment incidentally, that is without the benefit of reinforcement such as the satisfaction of a need. The suggestion that the search for novelty was a drive in the usual sense did not stand up against criticism that no organic basis could be found for it. If on the other hand an organism explored its surroundings to reduce anxiety, as one later explanation suggested, then what led it to take the potentially dangerous first step of approach? If anything, there seemed to be an increase in the arousal level as well as the absence of the usual consummatory climax. Harlow(1954) and Berlyne(1950,1960) among others began considering the problem in terms of an exploratory or manipulatory drive. Drawing together the shortcomings of drive theory in the areas of child psychology, ego psychology, cognitive and personality research, White examines this development and lists a set of behaviours for consideration: grasping, focal attention, crawling, exploration, attention, language, thinking and manipulation. They have generally been referred to as adaptive mechanisms, or ego processes by some, but not unified under any one motivation which could satisfactorily deal with all of them. Not arising from any deficit or specific organic source, nor from any external sources, White argued, they

may be subsumed under the heading of competence or "effectance". "Putting it picturesquely we might say that the effectance urge represents what the neuromusculature wants to do when it is otherwise unoccupied or is gently stimulated by the environment" (White, 1959, p. 321). Behaviour, although conveniently and artificially divided into segments, is nevertheless a continuous process and as such leads to no discrete or final goals. Thus the process of dealing with the environment must be reinforcing in and of itself.

As intriguing and convenient a concept as this may be, it fails to account for all forms of play which can be observed. Heckhausen (1964) proposed an alternative theory centred on the maintenance of an optimal range of arousal in the organism. Play (and daydreaming according to Singer) would be an activity which provides internally generated stimuli in the absence of sufficient amounts from external sources. This "arousal" theory can explain the presence and function of play and related activities without becoming enmeshed in the variety and content that can be involved. It is not, however, well supported by evidence nor does it solidly establish a causal relationship between the activity and arousal levels.

In contrast to both the drive and arousal theories there are a number of autotelic explanations (Appleton, 1910; Piaget, 1945; Nissen, 1954; Mitchell and Mason, 1934; Woodworth, 1947, 1958; Kelly, 1955 and many variants). Their basic premise is that a function or capacity "is its own motivation" (Nissen, p. 318). Piaget spoke of play as "purely for functional pleasure" (p. 89),

for the "pleasure of being the cause emphasized by Groos" (p.91). Once again the explanation allows for a variety of content consistent with the underlying cause. Still lacking a strong base of evidence, this type of theory remains incomplete and unable, for example, to identify the defining characteristics of play within its bounds or to accurately predict the occurrence of play. According to Klinger (1971) what little evidence exists favours the autotelic theories which, along with the arousal theories, seem best suited to account for the great variety of behaviours we call play.

The pursuit of the function of fantasy has led some investigators to compare it with dreaming. There is some evidence (Fiss, Klein and Bokert, 1966; Cartwright and Monroe, 1968) that fantasy continues with the content of an interrupted dream and that it can actually reduce the effects of REM-sleep deprivation. Such similarities have led to speculation that the two functions represent "baseline functions to which the human organism reverts if not otherwise occupied", with dreaming corresponding to the sleep state and fantasy, and perhaps all daydreaming, corresponding to the waking state. The next logical step would be to unite the two processes and state that the specific manifestation depends on the level of arousal at the time. In a sense this line of thought is similar to the autotelic theories in that a function independent of, but no doubt related to the other organic processes is postulated.

No discussion of daydreaming would be complete without a reference to the imagery which plays such an important role.

From the earliest descriptive work (Singer and McCraven, 1961) subjects reported a preponderance of visual images which were described as fairly clear. Auditory images have also been reported (Singer and Antrobus, 1963) although at the time they were frequently found among factors associated with neuroticism. Although there is no definite confirmation of tactile, olfactory or kinesthetic content, it is likely that these senses are represented to some degree. It is interesting to note the case of R. presented in Sommer (1971). The man was a very poor visualizer, and consequently has great difficulty with memory and functioning which involved any sort of visual or spatial detail, but was a proficient abstract thinker. Despite what would appear to be a handicap to daydreaming, he reported much of this activity but it was of a very abstract nature. Even as a child his fantasies developed like plot lines rather than as a succession of images. Evidently daydreaming can occur in more than one way.

Certainly imagery has long been respected as a powerful and enriching addition to other stimulation. It gives more information about an object or event but in the process adds a dimension of reality. It is especially effective in enhancing and enlivening representations of a full-blown experience, such as descriptions or memories, which are at least one step removed from and often only a pale reflection of the original event. Images which are particularly powerful are described as "vivid", harking back to the Latin root "vividus" meaning alive and suggesting that the impact of the representation in the cognitive and sensory systems produces an effect very similar to that originally experienced. That is, the event almost seems to recur.

It is no wonder, then, that vivid images can be emotionally arousing, a fact that has not escaped great speakers or advertising promoters.

Research has also established the power of imagery in facilitating learning. The investigation of learning and memory, which usually involved the use of word pairs, quickly alerted psychologists to various mediators - mechanisms whereby an association could be formed between even two disparate words to improve recall. Countless studies of mediation have taken place and many methods have been uncovered. Exactly how they operate remains unclear. A dissertation by Prytulak(1969) suggests the principle is one of taking information from the external world, codifying it according to some familiar scheme and then storing the result for later retrieval. One particularly effective mediation procedure involves visual images representing two words or ideas combined into a single pictorial unit (for example see Wollen,1969). That the use of imagery is actively connected to one's ongoing functioning has been suggested by results obtained when Paivio and Okovita(1971) tested blind and sighted subjects for recall of word pairs with both visual and auditory associations. Words with a high visual and low auditory content (such as star-tower, green-palace, poster-juggler) were tested along with pairs in which both modalities were strongly represented (ocean-clock, railway-whistle, trumpet-rattle). Sighted subjects had better recall overall and did better than blind subjects on word pairs with a low auditory content. Blind subjects whose major sensory modality was auditory had less difficulty recalling word pairs with a high auditory component than those

low in that factor. Such results lead one to postulate a relationship between routine functioning and type of imagery. More comprehensive studies comparing different patterns of sensory dominance are in order and should prove of interest.

In describing the strong tendency to use such mediators Pavio(1971) says "Associative strategies, coding or transformation of items and so on are the rule rather than the exception in verbal learning situations, at least for normal adult subjects. In fact, special procedures are necessary to override strong associative habits in order to study 'unmediated learning' "(p. 339). Although, as stated, these results apply to one type of verbal learning, one cannot discount their importance given the highly verbal nature of much communication between people. The use of imagery, which is a major component of daydreaming, to facilitate learning and communication adds to the developing impression that daydreaming may not be far removed from the basic thought processes.

If imagery aids memory then perhaps it enhances thinking in general as well. It is difficult to be sure of this since the procedure of recalling paired associates is comparatively simple next to the complexities of recall, organization and processing of information required to construct a sentence or to solve a problem. Still, it would seem that imagery plays a role in the process. Since it is a component of daydreaming, the latter may also be related.

It is the processing of information that Singer(1975) focuses on in his attempts to define and understand the daydream-

ing process. He notes the tremendous input of information from the environment which, along with the associations that this generates, must be processed and organized in some way. Simply to speak of storing this material is no doubt inaccurate and it is preferable to envision continuous processing. Furthermore, says Singer, because some behaviours are overlearned and can meet environmental demands without requiring much direct attention by the individual this leaves "channel space" for material not directly related to the immediate situation. Into this space come thoughts, feelings and images which are then sifted through, associated with others, accommodated in the system and manipulated. There is a wide range of content which comprises these daydreams. The factor analytic study by Singer and Antrobus(1963) examined correlations between daydreaming and 100 variables describing both content and associated personality characteristics. Of these, approximately 70 were related, condensing into twelve factors. It would seem, therefore, that daydreams are anything but a simple matter of escapism or musing. Singer maintains that they are a manifestation of ongoing cognitive processing which certainly differs from one individual to another in content, but which is also attended to in differing ways. It may well be that, although sharing a general definition, there are several distinct types of daydreaming and a diverse set of functions to accompany them. From both formal and anecdotal evidence one can already discern several possible functions: arousal reduction, memory aid, memory playback, planning and organization and a forum for general musing. To explore the occur-

rence and uses of daydreaming many more descriptive studies are needed. Associated, antecedent and resultant conditions must be examined.

Before moving to the specifics of this study mention should be made of one aspect of daydreaming which has found a clinical application. From the earliest, Singer and Schonbar(1961) outlined what they thought to be the optimal use of this activity, namely the exploration of self-other relationships, consideration of one's own actions and the practise of role relationships. This idea of self-knowledge was used by Freud in his free association technique - the verbalization of ongoing thought no matter how seemingly irrelevant. By having his clients lie quietly on the couch with their eyes closed to reduce external stimulation he had them concentrate on internal processes. Singer(1971) notes that in Europe imagery and daydreaming have been valued much more highly than under the empirical tradition of North America. Such appreciation has led to the development of the formalized "guided daydream" technique. Briefly, the procedure involves having the client relax and imagine some scene, describing the details and associations as they occur and are experienced. The clinician notes various references, symbols (of particular importance to the European schools of therapy) and indications of conflict, but the greatest therapeutic value of the technique is the opportunity for self-exploration. For some clients this itself is a new experience and can be of immeasurable importance both to their personal lives and to the course of therapy, whose very nature depends on such sensitivity. Schneidler(1972) describes the use of such a technique

with a group of pre-adolescent boys. The particular imagery he used had symbolic value in the psychoanalytic framework, but the greatest usefulness of the exercise seemed to be in creating the climate for a frank emotional exchange through the sharing of an emotional experience as private as a daydream. Schneider noted that in contrast to the difficulties and disruptions of previous sessions this one was both productive and meaningful.

This particular application of daydreaming, complete with highly symbolic imagery, has not gained wide acceptance in North America and the majority of uses are in Europe (for a bibliography consult Malan,1976). Some form of imagery and daydream use has, however, entered into several therapies and a detailed account is available in Singer and Pope(1978a). They note with some irony that although many of the behaviourally oriented therapies developed partly as a reaction to the psychodynamic tradition, their proponents are gradually learning the value of a person's inner resources. The use of imaginal components in aversive techniques has become very popular among behaviour modifiers and cognitive behaviour therapists. Wolpe's methods are probably the best known and most thoroughly researched of these and is considered effective. Covert sensitization is frequently applied to addictive disorders such as alcoholism with some success(Cautella,1966,1970;Anant,1967). Another method, covert modelling, has also been well researched and Meichenbaum's work(Meichenbaum,1974;Meichenbaum and Turk, 1976) in providing self-instruction through verbal and visual imagery has been quite successful. Overall, imagery is increas-

singly respectable among clinicians in various applications and perhaps full-fledged daydreaming techniques are not far behind.

The study of daydreaming as a separate aspect of inner experience is occurring along with, and to some extent merging with, a more general examination of consciousness. Singer and Pope(1978) comment on the "half-century sleep" of psychology with respect to inner experience. Despite a gradual awakening a great deal of attention has for some time been focussed on rather narrow and specific tasks "e.g. the time it takes to rotate mentally a geometric form"(Singer and Pope,1978,p.3). This is no longer true as a rule. Hilgard(1980) notes that consciousness has become a more acceptable concept in several fields of psychology either because some aspects of it have been operationalized (as in the case of physiological correlates of dream- or REM-sleep) or because it proves useful as an intervening construct. Suffice it to say that this unobservable phenomenon is being studied more and more carefully by empirically oriented psychologists.

Daydreaming is beginning to fit into this overall pattern. The initial attempts to define daydreaming in terms of content alone, usually of a fanciful nature, were unsatisfactory since they left out types of thought which infunfunctional terms occurred in precisely the same way as daydreaming. Continued observation led to increasing difficulty in separating daydreaming from any other type of thinking in a meaningful way. This opened the door for Singer's speculations (1974,1975) that daydreaming was in fact nothing more than another channel of information pro-

cessing. It may have been difficult to accept this theory, and it has yet to be substantiated, because psychologists are products of Western culture and have held a subtle but noticeable bias in favour of certain kinds of thinking. Realistic, sequential, active problem-solving, characteristic of left-brain activity, has held a more respectable place and has therefore been studied more extensively than its right-brain counterparts. The more fanciful kind of daydreaming and other examples of impulsive, diffuse, passive and artistic-creative thinking have received cursory attention, at best. This is changing also. As differences between the style of functioning associated with each of the brain's hemispheres are recognized and explored right-brain activity is being accepted as a different but equally valid kind of functioning rather than as an inferior type of ideation.

Bakan(1978) reviews some of the work in this area which is uncovering an extensive list of left-right differences on dimensions other than style of thought. Some of these include disease tendency, perception of anxiety, amenability to different kinds of therapy and differences in quality of sexual experience. Many of these are based only on clinical impressions and will need to be confirmed by direct methods. He goes on to speculate that beyond hemispheric differences there may also be certain styles of functioning which correspond to what level within a particular hemisphere is dominant. The possibilities are many at this stage.

These developments relate to the global view of mental

functioning. Daydreaming per se may prove to have been only a gross and transitory concept. It has been used almost as a catch-all until it was possible to suggest that the wide range of thinking styles and content occurring as intrusions on ongoing thought was in fact not much different from the brain's usual mode of functioning. Timing of occurrence seemed to be the major point of differentiation so that virtually any kind of intentional, on-task thought could, in other circumstances qualify as a daydream. Conceptualizing more than one channel of information processing and speaking of varying awareness of the channels helps to eliminate the artificiality and ambiguity which had crept into the definition of daydreaming.

What is needed now is continued study of global functioning to reconnoitre this territory more adequately so that any consideration of specialized aspects of it can be understood in the proper context.

Klinger(1978) provides an example of such a descriptive approach using questionnaires and thought-sampling. The thought-sampling technique requires subjects to complete a short questionnaire about their ideation just prior to hearing the signal from a portable "beeper" device they carry with them for several days. The resulting sample of thoughts was then examined along several dimensions which might prove useful in describing and understanding classes of thought. Some of these dimensions included directedness of thought, type and detail of imagery, time of life associated with the thought, relatedness to current external stimuli and degree of integratedness versus diffusion

of thought. Klinger also makes some interesting speculations as to what determines thought content at any given moment. He discusses the construct of "current concern.... the state of the organism between the time it becomes committed to pursuing a goal and the time it either gains the goal or abandons the pursuit." (1978,p.249). Goals can be variously defined and a person may be pursuing several of them at any time so that there are multiple factors helping to determine thought content. Certainly the variety of daydreams and their relevance to various aspects and concerns of the person (though not to the immediate task) are explicable by this concept. It has been empirically determined, according to Klinger(1975,1977), that having a current concern makes one particularly sensitive to environmental cues relevant to it and that thoughts in a given period will tend to deal with that concern. It is also interesting to note Klinger's earlier comments(1971,p.48) that some people fantasize excessively because their operant functioning is temporarily out of commission due to the complexity of the given problem or irreconcilable conflicts which have arisen in trying to deal with it mentally. All of this discussion harks back to earlier conceptualizations, even by Freud, about the problem-solving nature of fantasy and daydreaming.

The construct of current concerns allows for the complexity and flexibility of thought processes as well as for the variety of content that can be involved. It will be interesting to follow its progress as research in this field continues.

The Focus of This Study

A recurrent finding in the history of daydream research is the basis for this study, namely that much of the content is of an interpersonal nature or at least involves some human elements. With the possible exception of hermits, every individual lives out his or her life in close and frequent contact with others who, not surprisingly, take up much time, effort and therefore "channel space". No doubt the philosophical contemplations of even the hermit frequently revolve around some human elements. Certainly the range of information that we possess about people and the many points of interface between individuals is wide: physical characteristics, positions in social, political and economic structures, emotional impact, actual behaviours, the list is a long one. The question being pursued here is this: what aspects of others are attended to within the confines of a daydream? Would virtually any type of information be a potential topic or is daydreaming set aside to consider only certain matters?

Such questions fall into the realm of person perception, an area that social psychologists have been examining for the better part of this century. Early work centred on the verbal and non-verbal cues people used about each other, then on the process whereby these cues were combined into an impression. The vast majority of research has been in the form of manipulation of information and of perceiver characteristics in an effort to discover the central factors of this process.

Some authors, notably Jones and Day(1958) believed this to be an isolationist approach and called for a different line of attack. Furthermore, there were doubts as to whether the descriptive labels had the same meaning for the subjects as for the experimenters. Later research confirmed that the viewpoint of the perceiver was a unique one and could lead to perceptions of a given situation which were different from those of the participants(Nisbett and Jones,1971;Hastorf et a.,1970). It was suggested that the free response approach would be more fruitful in the study of social perception because it was less vulnerable to the error of artificially imposing a structure which did not accurately reflect the actual ongoing process. Asc(1946) in his study of impression formation had used free descriptions not structured in any way by instructions or procedures but had examined only the actual process and not the dimensions used by the subjects. By the 1950's Kelly and others had followed up this line of research to some degree but soon encountered some basic problems. Jones and Day(1977) summarize them as follows: one could do nothing to influence actual word choice even to keep it constant across subjects; words or dimensions not usually associated with a particular object of judgement could not be introduced because the result could be to force the subject to fall back on convention; and finally, category overlap could not be assumed to be an indication of a real connection between elements, but could easily have been an artifact of that particular subjects or exercise.. The additional methodological problem of how to treat this raw data for anything but elementary descriptive results added to the factors making this

approach unpopular. With the advent of sophisticated mathematical formulae this problem could be alleviated somewhat but, in the end, only limited relationships between elements could be shown and little could be done to get at the details of structure in person perception. Research, therefore, tended to avoid this path.

One particular study did follow this rather phenomenological tack. Beach and Wertheimer(1961) studied descriptions of certain individuals (the actual identities having been specified only to give some comparability across subjects). No restrictions were put on the content of the descriptions in order that the subjects could use whatever dimensions they chose to focus on. This, it was hoped, would indicate how people perceived others, at least as far as indicating what types of information were relevant. In a pilot study this same sort of procedure was followed and the resulting descriptions surveyed by judges to identify the broad categories used. The result of the main experiment were then categorized according to this scheme.

The difficulties inherent in such a procedure notwithstanding, other investigators have used it successfully. Richardson, Hastorf and Dornbusch(1964) applied it to the study of how a physical disability affected a child's self-concept. Dornbusch et al.(1965) also made use of this free response method, as did Yarrow and Campbell(1963) in an enthusiastic treatment of the subject. Bjerstedt(1961) went so far as to develop a clinical interview technique based on exercises to discover the unique perception that an individual has of himself and others.

The method of Beach and Wertheimer was applied to this study of person perception in daydreaming. The major task was to determine which categories of information about people, if any, predominate and are especially attended to in daydreaming. The content categories empirically derived by Beach and Wertheimer were adapted for use here and are outlined in Appendices B and C. The subdivisions made are a feature of this particular investigation to allow for a comparison between references to the subject-daydreamer and references to others. Evidence from several previous studies (Jones and Nisbett, 1971; Nisbett et al., 1973; Hastorf et al., 1970) has shown the tendency of individuals to attribute their own behaviour to the influence of external circumstances while regarding the behaviour of others as stemming from enduring personal characteristics. The findings will be discussed later.

It was also deemed instructive to compare a person's description of others and the pattern of category use there to that found in daydreaming. Is there any overlap between the two situations or are they different?

Another feature of this study involved a subset of the Imaginal Processes Inventory (Singer and Antrobus, 1972) which, according to Huba (1980) provide acceptable approximations to the three major factors of daydreaming. The scales and their respective factors are as follows:

- | | | |
|--|---|--------------------------------------|
| 1. Visual and Auditory Imagery
(scales 7 and 8) | - | Positive-Constructive
Daydreaming |
| 2. Hostile and Guilt Daydreaming
(scales 18 and 20) | - | Guilt and Fear of Failure
Factor |

3. Mindwandering and Distractibility (scales 14 and 26) - Attentional Control Factor

For additional information items were included from other scales and will be specified in the Procedure section. We may consider these daydreaming factors to be tapping major differences between types of people, based on the history of their derivation. If so, then perhaps certain patterns of person perception correspond to these types. For instance, do people with fleeting, achievement oriented daydreams also see others in terms of external factors? Do people with generally positive daydreaming patterns show any particular pattern on perception? Would the anxious group low in the sense of personal adjustment pay careful attention to the reactions of others, perhaps in an anticipatory and self-protective manner? Results pertaining to this discussion will be dealt with presently.

Method

Subjects

The subjects were volunteers from three summer session undergraduate courses at the University of Manitoba. Initially there were 67 volunteers of whom four withdrew or did not participate and seven submitted incomplete or otherwise unusable results. This left 56 subjects, although it was their responses which constituted the real subjects or units of analysis. Course credits were given for participation.

Four age groups were formed: 18-25(35 subjects), 26-35(13 subjects), 37-49(5 subjects), 50-67(3 subjects). The ratio of males to females was 2:3.

Procedure

In the first session subjects provided background information (name, age, sex) and were assigned code numbers. They were then asked to write descriptions of the following people:

1. a fellow worker or student
2. someone you have known for many years
3. a favourite relative
4. someone for whom you have little or no respect
5. a demanding and difficult acquaintance
6. someone you are afraid of

These identities were of no intrinsic interest, but specifying general types allowed for at least this much consistency between subjects. No guidelines or limitations were given as to length or dimensions of the descriptions so that subjects were free to choose whatever characteristics they deemed relevant. It was these dimension which the study examined.

Following this the subjects were asked to keep daydream journals for the two or three days between sessions. This period was chosen to allow sufficient time for the recording of a considerable number of daydreams sampled at different times and locations. The definition of a daydream was specified in written instructions as follows: "any thought which is irrelevant to and intrudes on an ongoing task. This task could consist of doing something (writing a letter, polishing the car, driving somewhere, dialling a number), making a perceptual response to the environment (looking at a list, listening to music) or thinking about something (constructing the next sentence of a report, trying to remember something, multiplying

figures). It does not involve only fantasy but could just as easily be a reminder to do something, a flashback, wondering about something or making plans for the future (immediate or distant)!"

The subjects were asked to record as many of these as possible, using point form if this was more convenient, and specifying who or what was thought of, the action involved and any emotional components. For example "I was thinking about the vase I broke yesterday and how my sister will react when she finds out." These daydreams were to be recorded on small notepads provided at the first session. It was pointed out that these pads should be small enough to carry around conveniently so that samples could be obtained from several situations in the two day period between sessions.

The second session was held to collect the daydream journals and to have the subjects complete a subset of the Imaginal Processes Inventory. The scales used were as follows: Visual and Auditory Imagery (scales 7 and 8 respectively), Hostile and Guilt Daydreaming (scales 18 and 20), Mindwandering and Distractibility (scales 14 and 16), Curiosity:Impersonal-Mechanical (scale 22), Curiosity:Interpersonal (scale 23) and Need For External Stimulation (scale 26). The items from these scales were arranged in a questionnaire format and required the subjects to rate statements about daydreaming on a scale of 1-5 according to the degree to which each statement reflected their daydreaming style.

At the end of this session subjects were given a brief summary of the variables and purpose of this study.

Results

For the analysis the Free Descriptions (six from each subject) were broken into units expressing complete thoughts about the object of the description. This yielded 3,563 units. The same procedure was followed for the daydream journals and 2,064 units of data were extracted.

Each subject's responses were then classified according to the scheme adapted from Beach and Wertheimer(1961, see Appendix B for Free Descriptions and Appendix C for Daydreams). The ratings from the abridged IPI questionnaire were averaged within each scale or factor and a subject classified as being a High, Medium or Low scorer for each one. This is an informal method as no formal means of arriving at a total score has yet been provided.

Inter-judge reliability for the categories was determined by having a sample of 258 responses from five Free Descriptions categorized by a second judge. A third judge did the same for 55 daydreams taken from three Daydream journals. A 2x2 contingency table was constructed for each category with cells corresponding to agreement by both judges that a category applied, agreement that it did not apply and two cells for the two conditions of disagreement. Phi coefficients resulting from this procedure appear in Table 1. The average reliability for categories applied to Free Descriptions is higher for two reasons. First, these categories were designed to apply to, and in fact were derived from, descriptions of others. Secondly, not all categories were used in the daydreams sampled, or appeared once or

twice only. Certainly there were difficulties in adapting these dimensions to daydreams, but the scheme seemed to provide an adequate framework within which to view person perception in daydreaming.

Parametric procedures were not appropriate for this analysis both because the data were of a qualitative nature and in view of the fact that no information exists, even in conjectural form, as to the nature of the categories' distribution. Beach and Wertheimer, who derived these categories empirically, preferred to make no assumptions about the distribution and availed themselves of non-parametric statistical procedures. For this study Chi-square tests of association were performed to examine the relationships of interest. The results, as well as the strength of associations, are summarized in Table 2.

Overall, statistical significance was achieved in every case, indicating that the kind of interpersonal information considered both in Free Descriptions and in Daydreams was related to a subject's age and sex. Furthermore, varying daydream styles as measured by the IPI also correspond to how people are perceived in daydreams. The size of the phi coefficients (which serve only as descriptive statistics and have no probabilistic interpretation in this case) show that, for the most part, these attributes are not strongly related. Possible exceptions are the pattern of category use according to the type of thinking (Free Description vs. Daydreaming), categories used in Free Description according to the subjects sex and categories used in Daydreams about oneself as opposed to others.

Power analysis conducted for each of the tests showed results in excess of .99 and we may be confident that enough data was available to detect any relationships which existed.

Category Use in Free Description vs. Daydreaming

At the outset it must be underscored that complying with a request to describe another person does not directly correspond to thinking about that person, or any others, in daydreams. Still, both kinds of thinking involve cognitions about people and it was deemed of interest to examine the dimensions involved in each case.

Of all the relationships examined, the one between category use and type of thinking emerged as the strongest ($\phi = .41$). Not separating out daydreams referring to the subject from those referring strictly to others for the moment, we may examine category use generally. While subjects in both conditions emphasized the behaviour of others (category 4) and their own feelings and attitudes (7), they made little reference to values and ideals (10). Beyond these similarities, however, some relatively large differences were evident between the two conditions. In their Free Descriptions subjects made use of information which could be considered of a social and emotional nature more so than when daydreaming. Specifically, feelings and attitudes (6), enduring personal characteristics (8), personal adjustment (9) and considerations of ability and achievement (11) were prominent in the Free Descriptions. Appearance (1) and general circumstances such as economic, educational and social status (3) were also important here. In contrast, Daydreaming was characterized more by

ideas about family and personal background (2), reminders about the subject's own behaviours (5), personal goals and directions (12) and thoughts about recreational interests (13).

Clearly daydreaming about people and describing people are two very different activities. A closer examination of the actual content of the daydreams revealed that much of what occupied subjects were reminders about tasks they had to perform and plans for both the immediate and more distant futures. Any obvious attempts to describe and in some manner capture the essence of others formed an extremely small proportion of daydreams. Even so, there were obvious differences in what aspects of people, both themselves and other, the subjects attended to. No doubt the Free Descriptions of others called for some sort of decision-making process - a synthesis and encapsulation of the most important information available. This is evident in the inclination to grasp more enduring, underlying and perhaps explanatory qualities of a person when describing him or her. Of interest here are the observations of several investigators (Jones and Nisbett, 1971; Nisbett et al., 1973; Hastorf et al., 1970) that a person accounts for his own behaviour differently than for the behaviour of others. The specific question of references to the self as opposed to others within daydreaming will be dealt with separately. While there was a tendency to make reference to enduring characteristics of others, as in the studies of attribution, there was no provision for a description of the subject him- or herself. Such a description could have been expected to account for the subject's own behaviour by invoking external

external circumstances. This study, however, did not make provision to test this possibility.

When the Free Descriptions were compared only to those daydreams referring to other people a relationship of some interest ($\phi=.44$) became evident. The tendency for recreational interests to be more common in Daydreaming no longer held true for references to others. This was also true for matters of family background. The behaviour and feelings of others took on far greater importance than any other category in Daydreaming, accounting for 51% and 20% respectively of all ideas as compared to 19% and 2% in Free Descriptions. Personal goals were once again more important in daydreams. The idea units in the Free Description condition were also more evenly distributed among the dominant categories, although the overall tendency to place more focus on underlying characteristics than on actual behaviour was notable.

Free Descriptions

1. Category by Sex

In their original study of undergraduates at the University of Colorado, Beach and Wertheimer (1961) had found that males and females differed in the way they described people. Males relied on appearance, background, occupation, values, abilities, ambitions and interests (categories 1,2,3,10,11,12,13) more so than did females, who perceived other in terms of social interactions and personal adjustment (categories 5 and 9). The sample in this study showed itself to be quite different. While males showed a slightly greater tendency to speak of background and ambitions

as before, they were no longer dominant in the other categories. Females, while maintaining an emphasis on the personal adjustment of people they described, now used ideas about ability more than did the males. This change in dominance patterns, the lack of striking differences in ranking of categories by frequency of use and the relative weakness of the relationship between sex and category use all suggest that the intervening years have led to a greater degree of androgyny among young people. Certainly the sample included a wide range of ages, but 64% of the subjects were under 26 years of age and it is this group which had the greatest opportunity to have its attitudes and outlook affected by the recent socio-cultural changes while in their formative years. Young men and women did not seem to differ very much in the way they perceive others.

2. Category by Age Group

As in the work of Beach and Wertheimer older subjects showed a pattern of category use different from that of younger subjects, although the influence of age was a very weak one ($\phi = .08$). While for all four age groups (19-25, 26-35, 37-49, 50-67) the behaviour of others accounted for an average of almost 20% of the responses, the overall pattern showed that older subjects were somewhat more distant and objective in their descriptions. They emphasized physical characteristics (category 1), general circumstances(3), recreational interests(13) and family background(13). This contrasted with the younger groups who used categories describing personal adjustment(9) and attitudes/opinions(7). Even when the older group dealt with less objec-

tive material they were more likely to make reference to the more obvious characteristics (category 8) than to commit themselves to opinions about the self-concept and overall adjustment of the person (category 9). Once again this indicates a degree of distance from the person being described. One might have expected people with more years of experience with which to judge personalities to make inferences more readily. Their failure to do so begs an explanation. Perhaps they are products of an upbringing which encouraged them to "mind their own business", especially in matters where they might reveal something private about another person, or recognize that they have only limited knowledge about that person.

Daydreams

Some general comments are in order here about category use in daydreaming. In every analysis done the three most frequently used categories were, in descending order of use: behaviour (4/5), feelings and attitudes (6/7) and personal goals (12). They tended to account for about 50% of each group's responses, indicating that a great deal of what occupied the subjects' minds in daydreams was behaviour, feelings and goals. As will be shown later, the majority of these preoccupations concerned the subjects themselves.

Parenthetically, it should be noted that categories 4 and 5 were combined, as were 6 and 7, to coincide with subdivisions made in the other nine categories as used with daydreams. These subdivisions separated references to others from references to the subject-daydreamers. Such a dichotomy within categories 4

through 7 seemed unnecessarily difficult to make in light of the little interpretive value it was likely to provide and was therefore replaced with a combination of the appropriate categories into self-other units (e.g. behaviour of others would fall into category 4 while that of the daydreamer into number 5 and together they accounted for behaviour of the self and of others.)

1. Category Use by Sex

Although the sex of the subject had a relationship to category use this correspondance was not a strong one ($\phi=.17$). Males tended to occupy themselves with information about general circumstances(3) and recreational interests, although both males and females showed the usual predominance of ideas about behaviour, feelings and goals. Female subjects dominated the family background(2) and personal adjustment(9) categories. What is perhaps more noteworthy is the fact that males spread their responses across the three most used categories while female subjects concentrated 65% just in the categories of behaviour and feelings. What they failed to say about goals and ambitions was replaced by a particular interest in behaviour. An examination of the journals themselves revealed more references to the behaviour of others among females than among males. The latter group seemed more interested in their own plans than in what people around them were doing. This perpetuates, to some degree, the notion that females are more attuned to others than are males.

2. Category by Age Group

The differences in category use which emerged in this analysis



sis must be interpreted in light of two facts. First, there were only three subjects in the oldest group (contributing a total of 102 response units) and five in the 37-49 group (105 responses). Secondly, the phi coefficient for strength relationship was only .14 here. Among the more striking differences was the high concentration of responses in the categories relating to behaviour and feelings/attitudes among the oldest group. These two categories accounted for 72% of this group's responses, while subjects aged 18-25 and 37-49 spread out their responses to encompass personal goals as the third most frequently used category. These accounted for 78% and 65% of their protocols respectively. Subjects in their late 20's and early 30's were slightly more occupied with recreational interests than with personal goals. These people were likely to have had children of their own and since the study took place during the summer months, recreational matters were likely to have been a current concern.

It would not seem unusual for the oldest group to be less interested in long-term goals, having already lived out a large portion of their lives, but goals were not altogether abandoned by this group of older summer students. Still, it is likely that their major ambitions have already been dealt with. Contrast this with the ambitions of the youngest group whose responses are in keeping with the findings of Giamra(1973) and the discussions about the promotional and vocational content of fantasy among young adults dealing with parentalexpectations and establishing their futures.

While daydreaming frequently about behaviour, feelings and

and plans, there was relatively little attention paid to enduring characteristics, personal adjustment, values or ability by any of the groups, with one exception. Personal adjustment accounted for 8% of the responses from subjects aged 37-49, as compared to an average of about 2% for others. Whether this indicates a slightly greater tendency to muse about personality and adjustment in middle aged people or is merely an artifact of subgroup size and the general composition of the sample (about one third of the subjects were currently enrolled in an Abnormal Psychology course) is open to speculation.

Generally, it may be said that the daydreams of younger subjects encompassed a slightly greater variety of categories than did those of the oldest group. The latter was considerably lower in the number of references to goals and ambitions. The middle-aged part of the sample was distinguished by family concerns and a greater tendency to consider the personal adjustment of themselves and of others.

Imaginal Processes Inventory

The IPI, as discussed above, is an instrument for capturing several aspects of a person's imaginal functioning. A short version of the full questionnaire was adopted following Huba's suggestion (1980) that certain scales provided good approximations to the three major types of daydreaming which had been isolated. A formal short version has since become available (Huba, Anshensel and Singer, 1980).

1. Category by IPI-1

This factor is properly known as Guilt and Fear of Fail-

ure Daydreaming and has been associated (Singer and Antrobus, 1972) with fleeting daydreams about achievement and heroism and a generally negative emotional tone in daydreams. One might have expected that people whose imaginal life could be characterized as High on this factor would have daydreams falling into categories dealing with achievement, but not paying particular attention to the categories of a more reflective nature (perhaps feelings, enduring characteristics, personal adjustment and values). The results of the analysis did not provide an altogether satisfactory test of this possibility since only one of the 56 subjects fell into the High-scoring range. Although conclusions must be tentative, they are not without some basis.

A clear contrast emerged between the use of categories by extreme scorers, with High and Low differing by as much as 200% with respect to frequency of reference to behaviour, feelings and goals. Specifically, the subject who scored High on this factor showed a marked tendency to avoid daydreams about the behaviour of himself and of others, about feelings and attitudes or goals. It should be noted that paucity of responding did not account for this since the ratio of responses to subject was actually higher for this individual than the average among other subjects. Instead, the majority of his daydreams concerned themselves with appearance and other physical matters, general circumstances, ability, achievement and recreational matters. Along with other subjects, he gave relatively little consideration to personal adjustment and overall his daydreams were very brief and externally focussed. These results fall in line

with informal speculations. What is uncertain is the degree to which internal matters are actively avoided by such individuals or are merely overshadowed by external preoccupations. The answer to that question could have important implications for the well-being of these people.

2. Category Use by IPI-2

This factor was tapped by scales measuring the degree of distractibility and the tendency to let the mind wander off topic. The absence of responses in almost half of the Low-scorers' cells necessitated a combination of Low and Medium scores, which reduced the confidence in results somewhat and brought the phi coefficient down from .18 to .10. As before, daydreams were dominated by behaviour, feelings/attitudes and goals for both groups, although the High scorer seemed to concentrate on these areas more than did people in the other group. This is not to say that subjects were distracted by the behaviour of others, for example, because it was made clear that a perceptual response to the environment did not constitute a daydream, even if it was irrelevant to the task at hand. Allowing for the possibility of error or forgetting, there was nothing in the protocols themselves revealed nothing to suggest that the subjects reported the current behaviour of others rather than actual daydreams of their behaviour.

Some differences did emerge with regard to little-used categories dealing with family background and goals/ambitions, in which the High scorers were not well represented. Perhaps even their daydreams about goals, which require a fair amount of con-

centration and time, were cut short by distractions in the environment. This opens the door for the more likely and less involving daydreams to occur and to be recorded more frequently.

3. Category Use by IPI-3

This factor deals with Positive-Constructive Daydreaming and was the one for which most subjects scored High. The dominant group in several categories was that composed of subjects who had scored in the Medium range. They differed most strikingly in categories pertaining to family background, personal adjustment and goals. The first two categories were used very little overall so it would not be wise to make too much of the differences. The Medium group's daydreams were distributed more evenly among the three most used categories of behaviour, feelings and goals, averaging about 23% each.

While for High scorers many of the responses were of a concrete and practical nature in category 4/5 (e.g. "I must remember to....."), the Low scoring group had a rather high proportion of daydreams dealing not with their own behaviour, but with the behaviour of others (e.g. "I wonder what my sister is doing now?") Although this was not an uncommon response, it occurred a disproportionate number of times for this rather small group of Low scorers. This group also made the least use of daydreams about personal plans and goals. The plans of the High scorers were often very concrete and in fact qualified as examples of category 4/5, more in the sense of reminder to do something that was definitely in the near future. Those whose daydreams lacked this positive tone were not as likely to make plans at all, let alone

to concretize them. In the goal-oriented daydreams of the Low and Medium groups it was interesting to note that a sizable proportion of these daydreams had something of a negative tone to them: wishing to get out of some situation, being rather anxious about educational and career developments. This is in keeping with a score in this lower range on a factor which measures positive aspects of daydreaming.

4. Category Use by Curiosity: Impersonal-Mechanical

Contrary to what might be expected, subjects who scored High on this factor did not fall behind in all categories reflecting interpersonal and internal matters. In fact, High scorers were more likely to daydream about behaviour, feelings and goals than any other group. They also showed an interest in personal characteristics and family background. More in keeping with their avowed interest in impersonal matters, High scorers contrasted with Low scorers by daydreaming less about the behaviour of others and about their own, and made fewer references to matters of personal adjustment and self-concept. One could argue that statements about personal adjustment require more synthesis and therefore more willingness to consider various aspects of others in the interpersonal sphere than with which High scorers are willing to trouble themselves. Thus, they daydream about characteristic patterns of behaviour which are considered personality traits but not necessarily about the more involved concepts of personal adjustment. The High group also daydreamed more about recreational interests and general circumstances. In short, although they evidently did not lose

their interest in people, those with the highest degree of impersonal interest did spread their daydreams into categories not of an interpersonal nature.

5. Category Use by Curiosity: Interpersonal

Before delving into the findings regarding this factor it is necessary to point out that there was no inverse relationship between scoring here and in the Impersonal-Mechanical factor. Psychometrically the IPI major factors are only minimally related so that the two types of curiosity are not mutually exclusive.

In this instance conclusions must also be tentative because of the small sample of Low scorers and because the relationship was of limited strength ($\phi = .16$). Nevertheless, some differences emerged which bear examination. There was a clear separation of Low scorers from the other groups such that those with little interest in others were consistently lower in many categories of daydream content, sometimes by as much as 3-4 times. The individual protocols showed that their interests in goals and recreation were strictly with reference to themselves. As for High-scorers, the usual importance of feelings/attitudes was maintained with this group and overshadowed daydreams about goals and recreation. There was a small but noticeable presence of daydreams regarding personal characteristics, adjustment, values and abilities as well. These were most likely to be in reference to the daydreamers themselves, as indicated by the results of the self vs. other references analysis. Overall, there is some connection between the degree of curiosity about interper-

personal matters and the type of information dealt within daydreams about people.

6. Category Use by Need For External Stimulation

This investigation also suffered from a shortage of Low scorers, but even their low cell frequencies did little to show a strong relationship between scores and category use. The pattern which did emerge was within reasonable expectations, given the meaning of this factor. Although, as usual, all subjects daydreamed most often about behaviour and feelings, those showing a high need for external stimulation did so in a marked fashion - twice as often as Low scorers (taking into account relative group sizes). This same High-scoring group, when compared to Medium and Low, showed correspondingly little interest in categories 6 through 10 which concerned the internal aspects of others such as feelings, adjustment and values. These seem more like matters for speculation and musing than would be of interest to people with a need for more obvious external stimulation. In contrast to the High-scorers, those with relatively little need for such stimulation did indeed daydream more often about these internal concerns. In addition, one might have expected that people eager for external stimulation would daydream more about plans and goals - perhaps plans to engage in stimulating activity. In fact, High-scorers daydreamed about plans 50% less than did Low-scorers. Perhaps goals and plans arise from the kind of internally oriented activity that the former group had no preference for. Although these results are not striking, they are in keeping with the nature of this scale.

Category Use by Reference

Finally, we come to consider daydreams about the subject-daydreamers themselves as compared to those about others. As mentioned previously, a subject's daydreams about him- or herself did not necessarily involve another individual and so were not strictly interpersonal. Still, the daydreamer is also a human element and it was decided to examine the possibility of differences in pattern of category use according to who was in the daydream. This relationship, yielding a phi coefficient of .31, was the second strongest in the study after that between category use and condition (Free Description vs. Daydreaming). While the majority of daydreams (70%) referred to the daydreamer, there were some interesting patterns regarding category use for the two types of daydream objects. When daydreaming about themselves, the subjects took into account a wider range of content categories while daydreams about others were more likely to concentrate on the more obvious and immediate features such as behaviour. This general trend was not upheld in the case of category 9 in particular. It seems that subjects were more likely to speculate about the personal adjustment of others more than about their own. This is assuming that daydreams of this nature were not excluded by the subjects from their reports, but there is no guarantee that this sort of censorship did not take place. Assuming for the moment that these results are accurate, they are in keeping with the findings in social perception research in the area of causal attribution. More precisely, people have a tendency to explain the behaviour of others in terms of their

enduring characteristics while preferring to see external circumstances as the cause, or at least the major cause, of their own actions. It would be unwise to place too much confidence in these results as a confirmation of attribution research findings since this question was not specifically addressed, either in terms of the design or the analyses.

Summary

Briefly, these are the major results found in the study:

- a) Both Free Descriptions and Daydreams dealt mainly with behaviour and feelings, but Free Descriptions also showed an emphasis on deeper social and emotional attributes of people. Daydreams were more immediate in their orientation, often consisting of reminders to do something.
- b) Males showed a tendency to describe people in terms of background and ambitions more so than did females, who dominated the categories of personal adjustment and abilities.
- c) Older subjects distinguished themselves by describing people in more distant and objective terms.
- d) In daydreams males concentrated heavily on behaviour and feelings as well as on their personal goals. Females daydreamed less about goals but by the same token seemed more attuned to the behaviour of others. They also tended to refer to personal adjustment somewhat more than did males.
- e) The middle-aged sample showed a particular interest in recreational matters and personal adjustment after the usual emphasis on behaviour, feelings which all groups shared. The

oldest subjects were not much interested in personal goals, while the youngest subjects daydreamed about these often, and generally showed a wider variety of daydream content.

- f) People with a high degree of guilty and obsessional material in their daydreams were less oriented towards the behaviour of others or towards any internal material such as feelings, adjustment or values than were the other subjects.
- g) Highly distractible people, as measured by the IPI, seem to give little consideration to personal goals, perhaps because this may require extended periods of thought.
- h) People whose daydreams were not particularly positive demonstrated this characteristic even in daydreams about goals and plans, which often had a negative and anxious tone. They also seemed to wonder about others and what they were doing at the time. Perhaps they were unsatisfied with their own prospects and preferred to take comfort by making contact of sorts with people they were close to.
- i) Although not losing all interest in people, those with especially high mechanical interest preferred to daydream about rather objective, general information and recreational interests and avoided speculating about the personal adjustment of others.
- j) Low degrees of interpersonal curiosity corresponded to daydreams about personal goals and recreation while subjects with a high interest in others were more likely to make reference to ideas about feelings and attitudes.
- k) The preference for external stimulation corresponds to day-

dreams about people which do not delve into deeper social or emotional concerns. These subjects also showed little interest in goals, perhaps preferring to act rather than to plan.

All relationships in this study proved to be statistically significant. The size of the phi coefficients (which range from 0 when attributes are completely independent of each other to 1 when there is complete correspondance) indicates that the full extent of these relationships is determined by factors other than those examined here. We can say with considerable certainty that the categories of information used to describe others and which occur in daydreams about others are related to certain characteristics of the individuals describing and daydreaming.

Discussion

Some comments about this study in particular are in order before moving on to more general considerations. Comments by several subjects made it clear that to grasp, define and record a daydream was a demanding task. Certainly people are unaccustomed to paying such careful attention to their thought processes and the very mechanics of recording them no doubt interfered with their normal flow. A verbatim thought flow may have been more accurate but could also have been subject to strong situational effects. A daydream journal kept over several days at least constituted sampling over a number of different situations. The various methods for studying inner experience are briefly described and commented on in Klinger(1978).

The difficulties with daydreaming are compounded by the fact

that the definition has changed and expanded. Continued research left behind daydreaming-as-fantasy some time ago but is even now relegating daydreams to a secondary place within a more open approach to consciousness in general. The very nature of daydreaming also makes it very difficult to separate in a meaningful way from ongoing thought.

As regards the Imaginal Processes Inventory, it is unfortunate that the formal short form was unavailable for this study as its items are particularly well refined and may have provided stronger results. The instrument is undergoing continued refinements but its usefulness in comparison to other methods of studying inner experience has yet to be determined as the field as a whole has only recently experienced a resurgence of interest.

The major task of this endeavour was to specify and examine patterns of person perception in daydreaming, at least how they related to the kind of information about others and about oneself. Overwhelmingly and almost without exception, a single dominant pattern occurred with specific variations. Namely, the most frequent daydream content involved considerations of behaviour, of feelings and attitudes and of goals. The most striking aspect of the first two categories was their immediacy - the degree to which they represented very practical and current concerns. Behavioural references most often resembled internal memos of the sort "remember to do this" while feelings and attitudes showed a continuing awareness of how people around the subjects were reacting to them, to their own circumstances and how the subjects themselves felt. The issue of goals, while not

strictly concerned with immediate matters in the environment is nevertheless an important one when the directedness of behaviour is considered. The fact that many of the so-called plans were of loose nature and could be considered unrealistic must not disqualify them from consideration. Whether they act as internally generated reinforcement of some sort or perhaps serve another purpose is not yet known. Cognitive research into the efficacy of highly creative and speculative approaches to problem solving is beginning to lend a degree of respectability to this sort of activity and may shed some light on the function of fantasy per se.

There was somewhat less delving into underlying characteristics than might have been expected in this activity which lends itself to this so well. Perhaps daydreams are more a matter of immediate concerns and "raw data" about others which only later, as demonstrated in the Free Descriptions, are synthesized into impressions.

It was interesting to note that subjects with only Low or moderate ratings in the Positive-Constructive Daydreaming factor showed a tendency to be preoccupied with what others were doing. These others were usually family members or friends. It was found that even their forward-looking goal-oriented daydreams often were pervaded by a negative emotional tone. This was most often one of anxiety and unhappiness about the future. Klinger (1971) had suggested that people may fantasize (or daydream) excessively when their ability to operate actively on the world is blocked by conflicts or inability to untangle the difficulties

of the problem being faced. The increased mental activity could be part of the attempt to solve the problem, but what of thoughts which do not seem to have any direct bearing on the issue at hand? It would not be wise to dismiss offhand the many circuitous and surprising routes to a solution. On the other hand, escapism is another potential route. Are these subjects with unhappy daydreams and futures which appear to give little comfort trying to find that comfort in mental contact with family and friends? The possibility seems more likely when considering the fact that many of the subjects were students in an Introductory course, which suggests that they may also have been undergoing their first major separation from home. This is not necessarily an unhappy development for many but could account for some of the results.

In contrast to this unusual interest in other people, the subject whose daydreams were unsettling in the sense of being somewhat guilt- and fear-ridden made very few references to other people. He preferred to daydream about rather external matters such as personal goals and general circumstances. Both this pattern and that of the somewhat unhappy daydreamers might prove fertile fields for more investigation.

As to the question of how others are perceived in daydreams in comparison to the subjects themselves, a difference was evident. Leaving aside the fact that subjects daydreamed about themselves most often, they also considered a wider range of information about themselves than about others. Since they have a direct involvement in these aspects while making only limited

contact with the lives of others, this should not be surprising. Other people were considered more often in terms of their outward behaviour, but also as thinking and reacting individuals. These were not merely part of the faceless crowd but were people with whom the subjects interacted on a regular basis and whose attitudes and feelings could have a direct bearing on the subjects. Daydreaming can, therefore, serve the purpose of a monitoring mechanism - keeping track of and dealing with aspects of the environment not in the immediate area but which are nevertheless important.

Part of what this study accomplished was to provide some verification for the relationship between IPI readings and the actual content of daydreams. The results regarding several of the scales corresponded well with not only the actual daydreams, but also with a classification of that content along the dimensions under investigation. Perhaps a more important contribution is that of reaffirming that daydreams are not merely a collection of random associations which the mind wanders off to, but a matter of interpersonal problem-solving. The vast majority of the daydreams involved some person, either the daydreamer or others. By far the most dominant ideas concerned everyday behaviour, feelings of the subjects and those around them and plans for future activity. These are all matters of dealing with the physical, emotional and social environment and indicate a certain degree of directedness in the intrusions of the subjects. Perhaps Klinger's construct of "current concerns" as the determinant of thought content has some validity.

Finally, it is important to remember that the IPI was developed after much sifting of personality inventories as well as daydream scales. The three major styles of daydreaming which have emerged correspond to three major personality classifications. If we understand personality as a construct encompassing the consistent patterns of a person's behaviour, especially as it relates to others, then the association between these patterns and the content of daydreaming makes it increasingly difficult to consider daydreaming as meaningfully different from ongoing thinking. Of course behaviour patterns are determined by more than a person's thoughts, but even the most stalwart behaviourists are beginning to accept the utility of some cognitive constructs in accounting for behaviour. Those for whom mental events are quite acceptable will recognize the importance of understanding how a person perceives people and events in his surroundings in any attempts to account for actions. Tapping the flow of ongoing and intrusive thoughts to this end is a method the clinical psychologists have long made use of in varying ways. Research in this sometimes nebulous field continues. Singer's contention that daydreaming is really another channel of information processing and Klinger's discussion of the "current concern" construct require further investigation. The results may do more to bring daydreaming out of isolation and into the bounds of normal conscious flow.

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Table 1
Reliability of Categories

Categories in FD	Phi (Judge1:Judge2)	Categories in DD	Phi Judge1:Judge2)
1	.98	1/1a	.81
2	.52	2/2a	.00*
3	.81	3/3a	.00*
4	.68	4	.73
5	.77	5	.79
6	.37	6	.81
7	.64	7	.71
8	.53	8/8a	.00*
9	.49	9/9a	.43
10	.34	10/10a	not used
11	.84	11/11a	.99
12	.77	12/12a	.71
13	.65	13/13a	.00*

mean phi = .67

mean phi (based on only those
categories used at least 4
times) = .71

* based on less than 3 respon-
ses

Table 2
 Tests of Association
 (Category Use and Subject Characteristics)

	Chi-square value	Phi coefficient
Category by Condition (FD vs DD)	960.372*	.41
Free Description:		
Category by Sex	225.152*	.25
Category by Age	72.947*	.08
Daydreaming:		
Category by Sex	62.317*	.17
Category by Age	124.394*	.14
Imaginal Processes Inventory:		
Category by IPI-1	55.282*	.16
Category by IPI-2	22.1**	.10
Category by IPI-3	101.273*	.16
Category by C:I-M	105.265*	.16
Category by C:I	62.537*	.17
Category by NES	58.555*	.12
Category by Reference (self vs other)	203.964*	.31

* $p < .001$

** $p < .05$

Note: L. Plackett (in The Analysis of Categorical Data. New York: Hafner, 1974, p.27) notes that several variants of strength of association statistics are of a purely descriptive nature with no probabilistic interpretation. Hays (in Statistics For the Social Sciences, New York: Holt, Rinehart and Winston, 1973, p.745) notes that this is true for phi coefficients from chi-square tables beyond the 2x2 level.)

Appendix A

Factor Clusters-Singer and Antrobus 1972

Factor 1		Factor 2	
Neuroticism and Anxious Absorption in Daydreaming		Social Extroversion	
Name	Loading	Name	Loading
CPI Tolerance	.78	CPI Socialization	.80
CPI Intellectual Efficiency	.72	MPI Extraversion	.79
CPI Responsibility	.71	G-Z Ascendance	.77
CPI Sense of Well-being	.71	G-Z Sociability	.73
CPI Self-control	.71	G-Z General Activity	-.65
CPI Achievement via Conformance	.71	S-C Motor Activity Preference	.52
CPI Achievement via Independence	.65	IPI Need for External Stimulation	.46
G-Z Objectivity	.63	IPI Boredom	-.41
MPI Neuroticism	-.51	CPI Femininity	-.39
G-Z Emotional Stability	.50	IPI Acceptance of Daydreaming	.36
IPI Mindwandering and Daydreams	-.47	IPI Bizarre Improbable Daydreams	-.31
IPI Absorption in Daydreaming	-.45	G-Z Emotional Stability	.31
IPI Daydreaming Frequency	-.42	G-Z Restraint	-.31
		IPI Problem-solving Daydreams	.27
		G-Z General Activity	-.65

Appendix A continued

Factor 3 Guilty-Obsessional Emotional Daydreaming		Factor 4 Positive-Vivid Daydreaming	
Name	Loading	Name	Loading
IPI Guilt Daydreams	.73	IPI Absorption in Daydreaming	.60
IPI Hostile Daydreams	.69	IPI Daydream Frequency	.54
IPI Fear of Failure in Daydreams	.68	G-Z Thoughtfulness	.49
IPI Achievement Oriented Daydreams	.61	IPI Self-reporting Tendencies	.47
IPI Frightened Reactions to Daydreams	.60	S-C Ideational Acti- vity Preference	.45
IPI General Daydreaming	.58	IPI Acceptance of Daydreaming	.42
IPI Hallucinatory Vividness in Day- dreams	.47	IPI Curiosity:Inter- personal	.42
IPI Bizarre Improbable Daydreams	.42	CPI Femininity	.42
G-Z Flexibility	-.34	MPI Neuroticism	.42
G-Z Objectivity	-.32	IPI Future-Oriented Daydreams	.41
CPI Self-control	-.31	IPI Visual Imagery in Daydreams	.38
		G-Z Masculinity	-.37
		IPI Positive Reactions to Daydreaming	.36

CPI California Psychological Inventory
 G-Z Guilford-Zimmerman Temperament Survey
 IPI Imaginal Processes Inventory
 MPI Maudesly Personality Inventory
 S-C Stein-Craik Activity Preference Inventory

Appendix B

Categories of Person Perception
in Free Descriptions

- | | |
|--|---|
| 1. Appearance | References to physical features, attractiveness, health, any physical matters |
| 2. Personal Background | Family life, early experiences |
| 3. General Circumstances | Social, economic, educational, occupational matters |
| 4. Behaviour of the Other
(object of description) | Actions, patterns of behaviour, but not interpretations or opinions of it |
| 5. Behaviour of others toward the Other | This includes behaviour of the subject toward this person |
| 6. Other's feelings, attitudes | Includes opinions, affective reactions |
| 7. Feelings and attitudes toward the Other | Include feelings of the subject. |
| 8. Enduring Personal Characteristics | Consistent underlying characteristics colouring the behaviour of the Other |
| 9. Emotional Adjustment | Self-concept e.g. "feels sorry for herself", "confused" |
| 10. Values and Ideals | Religious, political, moral, social values |
| 11. Abilities | Talents and achievements demonstrating these |
| 12. Aspirations | Ambitions, goals, direction |
| 13. Interests | Recreation, hobbies |

Appendix C
Categories of Person Perception
in Daydreaming

- | | |
|--|--|
| 1. Appearance of others | 1a. Appearance of subject |
| 2. Personal Background of others | 2a. Personal Background of subject |
| 3. General Circumstances of others | 3a. General Circumstances of subject |
| 4. Behaviour of others | 5. Behaviour of subject |
| 6. Feelings/Attitudes of others | 7. Feelings/Attitudes of subject |
| 8. Enduring Personal Characteristics of others | 8a. Enduring Personal Characteristics of subject |
| 9. Emotional Adjustment of others | 9a. Emotional Adjustment of subject |
| 10. Values and Ideals of others | 10a. Values and Ideals of subject |
| 11. Abilities of others | 11a. Abilities of subject |
| 12. Goals/Ambitions of others | 12a. Goals/Ambitions of subject |
| 13. Interests of others | 13a. Interests of subject |