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THE RELATIONSHIP OF COGNITIVE DEVELOPMENTAL STRUCTURES
TO THE FORMATION OF EGO IDENTITY IN YOUNG MEN

by

Robert Neil Leiper
B.Sc., M.A., University of Glasgow

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
in the Department
of
Psychology



Robert Neil Leiper 1981
Simon Fraser University
July 1981

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ABSTRACT

The study is an examination of the interaction of different aspects of 'ego development' during a single developmental period, youth. Writers have frequently taken a monolithic approach to theory in this area, but it is suggested that it may be better to employ a loose integration allowing for the coexistence of separable strands of development. Three such strands are proposed: content variables, cognitive structure and psychodynamic structure. The study focuses on the interaction of the latter two as this relates to the development of the sense of personal identity in young men.

Subjects were forty-nine male college students, between the ages of eighteen and twenty-four years. Each completed in writing Loevinger's sentence completion test, Kohlberg's moral reasoning interview, and two Piagetian formal operations tasks, combinations and correlations (cognitive structural measures); Cantril's 'Hopes and Fears' interview (yielding three content scores: time orientation, ideologising and introspectionist tendencies); and each was interviewed according to Marcia's identity status procedure (a psychodynamic measure). This interview was elaborated in content and extended in length to explore further the subjects' thoughts about the nature and importance of the commitments they might be entering into, their justifications for them, and their understanding of themselves and their situation in relation to them. Subjects were interviewed for between one and three hours.

Non-parametric analysis of the data from these measures found that cognitive structural scores showed low to moderate

positive inter-correlations. The measures of logical and moral structure related ($r_{\tau} = .5$) according to rules of necessary and sufficient implication as predicted and consistent with other research; emergent formal operations was a requirement for post-conventional morality and possibly for major stage 4 morality. The measure of 'ego' structure related in a looser way to the other two ($r_{\tau} = .23$ with logic, $r_{\tau} = .36$ with morality). Of the correlations obtaining between identity status and cognitive structure only that with moral reasoning was significant ($r_{\tau} = .27$). Attaining the two higher statuses appeared to be a necessary but not sufficient condition for the presence of post-conventional reasoning and possibly for ego level I5, but there was a full range of statuses at lower levels of moral development, 'ego development' and logical structure. Analysis of variance of the content scores showed only tendency to introspect to have the predicted relationship to either structural development or identity. A principle components analysis found cognitive structure and identity defining two major factors as targeted.

These results raise the possibility that the identity statuses and the processes of identity resolution differ in important ways at different structural levels, and this interaction was examined in greater qualitative detail by analysis of the extended interviews. Guided by cognitive developmental theory it proved possible to construct a hierarchical series of four levels of structural sophistication in the ways subjects deal with the problems of identity resolution. Each level is described and illustrated with interview material. The nature of each of the four identity statuses at each level is

discussed. The ratings of 'identity structure' thus obtained were found to correlate positively with other measures of structure, particularly Kohlberg's ($r_T = .59$). A complex reciprocal influence is hypothesised to exist between cognitive structural development and the resolution of psychodynamic issues. The results are discussed in terms of their implications for theories of ego development and identity, and their relationship to normal and abnormal patterns of development in youth and adolescence.

As various as the Lives of Men are -
so various become their souls... what
are the provings of [man's] heart but
fortifiers and alterers of his nature?
and what was his soul before it came
into the world and had these provings
and alterations and perfectionings? -
an intelligence - without Identity - and
How is this identity to be made?
through the medium of the Heart? and
how is the Heart to become this
Medium but in a world of Circumstance?

J. Keats (letter to his brother
and sister, 1819).

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Any age group may be studied from two divergent perspectives: as representing a developmental period with its characteristic tasks, problems, and patterns; or as manifesting certain general theoretical relationships which apply to persons of all ages. Of course this is largely a matter of emphasis. Normative developmental descriptions are often related to a general picture of human development underpinned by some theory. A theoretical viewpoint generally has implications for the pattern of development.

This study employs two primary theoretical perspectives in which this distinction is especially unclear, those of cognitive developmental structuralism, and psychodynamic ego psychology. They are applied to a developmental period, youth, which is itself less than clear cut. The point of the study is that in so doing we may increase the depth of our understanding of both the theories and the stage of life, though we may further decrease our sense of their simplicity. In the case of the developmental perspective, our hypothesis is that in applying these two theories together we may distinguish more than a single normative pattern for people at the stage of youth, that though certain developmental tasks may be constant they are dealt with in different ways depending upon one's developmental 'entry-point'. There are, in this sense, several lines of development. From the theoretical perspective the study is based on the assumption that more than one overarching theory is necessary to understand development, that neither theory subsumes the other but that each contributes different and complementary perspectives

which are not to be related in an overly simple way.

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The study attempts, then, to compare these theories of development and to offer an exploratory integration of them which provides a multi-dimensional view of a single developmental period.

The general context for this investigation is the tradition of theories of 'ego development'. Left at that, this term tells us very little, so ambiguous is it. Loevinger (1966) lists three meanings for it within psychoanalysis alone. Hauser (1976) contrasts two main ones - Loevinger's own structural hierarchical conception, and the clinical - functional analysis of the ego analysts. An even broader conception is offered here.

The ego is the system of meanings by means of which experience is structured, the patterned ways in which an individual interprets and responds to the world and himself, his frame of reference. This conception is developmental in so far as that framework is built up and modified throughout the life-span. It is 'cognitive' only in so far as motivation and emotion are subsumed by a broadly based conception of meaning (cf Kelly, 1955), but this once controversial view is increasingly legitimised by the growth of cognitive theories in psychology. It has its historical roots in a broad 'semantic' movement within the human sciences (Becker, 1971) and in the growth of information and systems theory (Nauta, 1971). This viewpoint is increasingly unremarkable and defines little in itself, but it does provide a context within which competing theories may be fruitfully contrasted. Each theory of the 'ego' is a different

way of analysing and mapping the pattern of an individual's construction of his experience. Thus Kohlberg et al. (1977) can draw a methodological comparison between psychology and literary criticism:

'The child psychologists' interviews are the humanists texts. The test of accuracy of interpretation is that if it is claimed that certain ideas are related in certain ways in the text that this relationship makes sense in the text as a whole.'

(Kohlberg et al. 1977, part 1, p.2)

'Frame of reference' is just what Loevinger (1976) says her theory deals with, but she appropriates the term to her own 'structural' view, structural in the sense of a developmentally hierarchical progression of stages. But 'structures' are simply coherent recognisable patterns in frameworks of meaning, and there are many of those, perhaps as many as our scientific curiosity cares to uncover. It is convenient to categorise the current relevant theories into three broad modes of analysis of ego structure and ego development. One of these is the cognitive structural group just mentioned; another is the psychodynamic model; a third may be called the socialisation model. This division is based on the kind of analytic categories used by the theories and the form of relationship assumed to exist between those categories. It need be in no way an absolute or exhaustive list.

This overarching perspective and the three-fold division of models within it is presented here as a general framework for clarifying our theoretical approach to the problems presented by late adolescence, youth, and young adulthood as developmental

periods. As Grinder (1973) points out the traditional approach to adolescence following in the wake of Hall's (1904) pioneering efforts tended to be taxonomic, normative, and descriptive. More recently flexible theoretically based approaches have been proposed as candidates for in-depth analyses. These theories can each be described as ego developmental in our broad sense of the term.

Our purpose in this introductory chapter is to describe each of the three models in turn and its application to the area of adolescence and youth, and then to compare and integrate them as a basis for the empirical study.

Socialisation Theories

Socialisation or social learning theories suggest that the basic process of development is learning one's culture's values, norms and patterns of interpretation and action, adapting to them, internalising them, or, more accurately, becoming them. The actual theory of learning used is of no particular concern here. In much sociological work such theory is at best implicit, often just 'common sense'. The major point is that the analysis is conducted at the level of 'content', it is not 'structural' in the usual sense of that term. This means in effect that no attempt is made to find a systematically related set of analytic constructs which apply with great generality. Such constructs still exist, but they are closer to the level of the data, that is the interpretations of the actors themselves, rather than being highly abstract.

Perhaps the best socialisation position for dealing

with ego development is Berger and Luckman's (1966) exposition of a 'sociology of knowledge'. It is so because it deals explicitly with the process of constructing meanings; it can function for our overall analysis as a baseline theory, a take-off point. Human behaviour and the relationships of individuals to their culture, one another, and their own lives are to be understood in terms of the creation and maintenance of a coherent 'social reality', a complex of attributed meanings involving the person, an 'identity', and the culture, his 'world'. 'Identity' is objectively defined as location in a certain world, and can be subjectively appropriated only along with that world. One is what one is supposed to be.

This means that there is no 'problem' of identity in a social world where values and norms are simply and coherently related to each other. 'Universe maintenance' - the 'nomic' function of ordering experience, putting everything in its right place - is a relatively straightforward matter. Only if there are conflicting definitions of reality realised in the community is one faced with the possibility of 'individuality'. The person then has options in answers available to the question 'Who am I?', and that question becomes real. There is a sense of choice with respect to identity, and so commitment, the consistent resolution of a choice conflict, becomes a problem. Basically commitment is the appropriation of some identity/world construct. It is central to the development of the 'ego', the frame of reference by which one construes one's experience as meaningful. Any specific commitment is part of this overall process of the socialisation of experience.

Development in this tradition, then, is the biography

of the individual's transitions between reality constructions and between identity locations within such a reality. In a complex world such transitions involve an element of 'choice' on the part of the subject. The question of 'free will' is not relevant, the theoretical question is what processes mediate the 'when' and 'how' of such transitions. For socialisation theories the place to look for the dynamic of development is the normative structure of the individual's social environment.

For instance, the existence of a normative 'age grading' system (Neugarten, 1964) constitutes a kind of self-fulfilling prophecy regarding developmental paths (to which psychological theories can be ready recruits). Linked to this is the corresponding process of 'role passage', the on-going transformation of role-sets throughout the life 'career' (Beckner and Strauss 1956; Strauss, 1959). Powerful and penetrating analyses of particular developmental periods or issues are possible at this level of theory. Relevant examples are Sebald (1977) on adolescent behaviour, and Komarovsky (1976) on sexual identity in young men.

This analytic capacity is of less interest in the present study than the theoretical basis that the view provides. What it makes clear is that in a complex social reality which requires a choice of identity heavy demands are placed on the process of 'legitimation'. There is a need to integrate meanings in disparate sectors of reality into some consolidated world, to resolve potential conflicts between different areas and periods of life such that the person continues to exist as a recognisable identity validated consistently by his experience. In this situation an individual has much of the responsibility for

constructing the meaning of his own biography, as he integrates his world vertically through his life-span and horizontally across different spheres of action. Much of this study concerns itself with an analysis of the qualities of these reflective processes of legitimation.

The limitation of this level of theory is that little attention is paid to the necessary features and constraints of the structure of human social realities and the implications these have for development and experience. The only condition which seems to be clearly implied by this view is consistency of meaning on a fairly common sense level. The other two forms of analysis explore these constraints by dealing at a more abstract level with the structure and dynamics of reality construction. It is the interrelationship between these two approaches and how the level of content relates 'up' to them that is the focus of this study.

Psychodynamic Theories

Psychoanalytic theory is often seen as a relatively maturational developmental theory in comparison with the social learning theories. Maturational paradigms are unlikely to be 'ego developmental'; they do not deal with constructed meanings. The ego psychoanalytic tradition from Hartman (1958) on is particularly important in moving psychodynamic theory away from this position, as are the various 'Neo-Freudians'. There is a growing perception that the metatheory should be reformulated so as to consider motivations as meanings (Schafer, 1967). The adaptational model links the person to his world in a way which

implies intimate transaction, and even a kind of continuity (Loewald, 1951); and it attempts to extend the developmental framework through the whole life-span (Levinson et al., 1978).

The core of the psychodynamic tradition is its analysis of the structural integration of conflicting motivations and identifications, and of the patterns of controls and defences which mediate these ambivalences. Development is the progressive resolution of a series of ongoing conflicts. In adolescence the new balance of drives resulting from puberty is an obvious challenge to the old psychic structures and provokes renewed conflict which must be resolved with a re-alignment of forces (A. Freud, 1958). For the theories of 'object relations' these realignments are conceptualised as changes in the definition of relationships with significant others (Blos, 1962).

It is no coincidence that the most creative thinker with an ego analytic orientation is also a major theorist of adolescence. Erikson's (1950; 1968) analyses were among the first to be based clearly on the importance of the meaning of experience for an individual. Related to this focus is his extension of the theory not merely 'vertically' to encompass the entire lifespan, but 'horizontally' to include the person's social world in reciprocal interaction with his intrapsychic dynamics. The conflicts and ambivalences which have to be resolved for Erikson are not simply those of internal motivations or immediate interpersonal relationships but those inherent in the entire culture. The parallels to the foregoing socialisation view of development are obvious. The social world structures and is structured by the actions and reflections of its individual members.

What Erikson added to the socialisation perspective was a theory of the developmental structure of the ego, focusing on the emotionally charged problems arising from inevitable and necessary conflict laden issues in the person's psychosocial adaptation and maturation. The core of this theory is the epigenetic developmental scheme which postulates a series of issues linked to life stages, each of which must be dealt with before proceeding to the next. The quality of resolution at any one stage influences the possibilities for resolution of subsequent stages. But development is by no means a make or break crisis at any single point - there is the opportunity to go over old ground, re-awaken former conflicts, and work out a new resolution. This is particularly true at the crucial turning point of adolescence. In fact the theory suggests that every issue is active in a particular form at each stage, and the issues and stages form a kind of matrix for mapping ego development and ego structure. Each stage can simply be most readily described in terms of a dominant issue.

What develops through this sequence is the 'ego structure'. In every life phase there is an issue which requires 'ego strength' in order to confront and resolve it; and the resolution of that issue confers further ego strength. This 'ego strength' is, one might say, integrity of structure. What is unique to psychodynamic theories is that the structure is described in essentially dialectical terms as being a conflict around some focal issue which comprises two poles. Though some presentations of the theory suggest that one pole is good, the other bad, what Erikson seems to intend is that the ego structure should strike a dynamic balance. Each focus then is a 'mode of

ambivalence' and the resolution which each person works out is in some degree unique.

The issue dominant during adolescence, according to Erikson, is identity achievement versus identity confusion. This issue of identity is crucial to his theory since around it a major consolidation of the past and a major direction setting for the future takes place. The concept has been crucial to psycho-dynamic theory in crystallising the importance of meaning and the mutual interdependence of individual and society. What then is 'ego identity'?

Erikson (1956) suggests that the concept be formulated 'from different angles'. Sometimes identity is a conscious sense of ones wholeness as a person, but it is also an unconscious striving for personal continuity and the synthesising process of the ego. It is the feeling of ones uniqueness as an individual but also the 'maintenance of inner solidarity' with the ideals of ones community. The basic notion then is one of integration - of forming a whole both of oneself, ones social world, and of the relation between them. For this to happen childhood identifications, with the emotional charge which these carry, must be reassessed and in an act of synthesis, be subsumed by new identifications with current significant figures; a new more appropriate self-definition and a set of commitments for life must emerge.

This process of resynthesis may be aided by a 'moratorium', a period of some disengagement and experimentation free from the demands of normal role requirements. The integration sought must involve not only ones values, motivations and

personal history but also one's personal endowment, the opportunities realistically available, and the values and ideology of one's social milieu. And so identity 'emerges as an evolving configuration which is gradually established by successive ego syntheses' (Erikson 1968, p.163).

This emphasis on integration and the establishment of a structure which can mediate the inevitable motivational ambivalences is different than, though by no means contradictory to, the content level analysis of a socialisation perspective where the emphasis is on describing identity as some 'location' in some 'world'. In fact Erikson tries to synthesise these views, and so runs the danger of confusing them. His conception is broad and general rather than precise. Other analytic writers such as Schafer (1967) have criticised it as 'impressionistic'. But this very generality makes the concept more researchable than the idiographic formulations of most psychodynamic theory. At the same time it is a difficult construct to operationalise accurately and fully just because of its richness. Bauer (1972) in a review of this problem suggests that most attempted measures have missed the 'multi-dimensionality' of the identity construct, narrowing it for simplicity of operationalisation (see also Bourne, 1978). Studies by Baker (1971), Jans (1971), and Thayer (1963) make it clear that most available instruments in large part lack internal consistency, and convergent and discriminant validity.

The measurement strategy with the strongest claim to accurately represent Erikson's conceptions is Marcia's (1966). This semi-structured interview maintains some of the richness of clinical judgement but employs a four category system of

'identity statuses' on which an impressive array of validity research is accumulating (see Marcia 1976, and 1980 for reviews). The statuses classify people according to the variables of commitment and crisis with respect to two major areas of identity formation, vocation and ideology. Identity achievement subjects have formed a commitment to some stance on these central issues after a period of questioning and exploration. Moratorium subjects are those currently in this decision making process and have no commitments. Identity diffusions also have no commitment; although they may or may not have explored choices in the past they are not currently doing so actively. Foreclosures do have commitments but seem to have taken these over from significant figures in their social backgrounds with little questioning of them or process of making them 'their own'.

The considerable variety of research situations used in validating and extending this scheme indicates that indeed a general quality of 'ego strength' is gained by resolving the identity issue through discovering a unique personal synthesis, and this quality is manifest in many different ways. Failure to resolve the issue in an 'achieved' mode brings penalties of various kinds of ego strength deficits - free anxiety in moratoriums, lack of self-determination in diffusions, and rigidity in foreclosures.

Marcia's work represents a creative simplification in identity research. It is not only a measurement technique but a conceptualisation which attempts to order at an abstract level the rich idiographic theory which is suited only for in-depth case-study research (such for example, as Erikson's (1968, 1962)

own work, or Paranjape's (1976) cross-cultural studies). The nature of this abstraction can be thought of in at least two ways. In terms of an idiographic 'interpretative' approach to the psychodynamic tradition these four 'types' can be viewed as particular dynamic 'themes', abstracted modes of emotional content. This approach is explored by the research of Donovan (1969) and Josselson (1973) in which the statuses appear in terms of their personal imagery and their inter-personal relations to represent post-oedipal, oedipal conflict, oedipal attraction, and pre-oedipal modalities. They seem to deal with variants of the themes of commitment, creative rebellion, security and continuity, and dissolution and fragmentation of attachment. The statuses are then ideal types representing the dominance of a particular theme. Marcia (1976) seems to favour this interpretation.

More recently Marcia (1980) proposes a more structural view - that ego identity may be theoretically considered from a cognitive point of view as a patterning of the 'self-structure'. What do the statuses represent in this case? Combining an understanding of psychodynamics as concerned with the integration of ambivalences and a dialectical interpretation of Erikson they may be considered to represent moments in a dialectical developmental process operating between the formation and maintenance of structure on the one hand and its flexibility and openness to change on the other; in polar terms, between rigidity and lack of definition. The identity statuses are concerned in this view not so much with crisis and commitment, which are used as signs or operational markers, as with the underlying structure of identity in its degree of world-openness and of self-definition

and of the degree to which the state of resolution of this dialectical process is one of integration or conflict.

Fundamentally these operational categories are a kind of psychodynamic shorthand, as much conceptual as empirical. This should alert us to the fact that 'commitment' and 'crisis' are simply signs used in operationalising the concepts more than they are vital to the structures that underlie the statuses. This perspective is lost if the empirical procedures get standardised in an overly mechanical way. Goldsmith (1972) in idiographic research independent of Marcia's comes up with similar constructs but proposes an interesting addition, that of 'identity appropriation', in which the anxiety of crisis is hurriedly resolved by 'latching on' to some convenient identity without thoroughly working things through. The point in general is to pay attention to the quality of identity resolution processes, rather than to go in the direction proposed by Gallatin (1975) by being more precise about the 'degree' of crisis and commitment. The present study attempts to extend this qualitative approach.

This brief theoretical analysis is presented because of the importance of emphasising that the psychodynamic perspective in spite of a richness of potential interpretation that can be confusing as well as very hard to research, can also be presented in a simplified scheme which is structural in form, but 'structural' in a manner unique to this tradition. The analysis is intrinsically dialectical in form and describes the dynamics of emotional ambivalences within a person's world. In this way it goes beyond the socialisation analysis which lacks a concept of emotional dynamics, and is yet distinct from the

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structural viewpoint of cognitive developmental theorists which represents a third analytic model.

Cognitive Developmental Structuralism

The group of theories we are calling 'cognitive structural' form part of a wide intellectual movement spanning several of the humanities and human sciences (Piaget 1970 a). They apply to psychological questions a metatheoretical approach which is part of a Zeitgeist. This movement has contributed to making the study of how people think about their world respectably scientific, has given credibility to the notion that it is the meaning of people's actions which is essential to understanding them, and has attempted to find satisfactory methods and an appropriate theory for studying these difficult and once unfashionable problems. It is this approach more than any other which inspires the thinking behind the present study.

The one man primarily responsible for the foundations of this approach in psychology is, of course, Jean Piaget. Piaget's structuralism is a developmental theory, tracing the evolution of the forms of thought through their ontogenesis in the growing child. Development is seen as a progression based on the principles of organisation and adaptation. Cognition and behaviour at any time hang together in a system of coherently related components; through time the character of that system is transformed in interaction with the world, becoming increasingly 'equilibrated', or capable of adequately processing relevant informational relationships.

Piaget claims that this process is 'constructive' in

character. By this he means firstly that the organism's cognitive system is self-regulating in such a way that adaptation is a basic tendency and so competent thought is intrinsically motivated; and secondly this is not a one-sided process but a transactional one between a 'stimulated' organism and an 'interpreted' environment. So knowledge is built interactively out of this relationship between the organism and its environment. Thus - 'Thought transforms and transcends reality' (Piaget 1970, p.707). This process of adaptation works dialectically through the complementary operation of two principles: assimilation (interpretation in terms of existing cognitive structures) and accommodation (modification of those structures in response to new material). Development is an interplay at every moment between continuity and transformation, governed by a principle of equilibration or integrated balance.

The cognitive material undergoing development in this way is a set of 'schemes', transformations of experience, actions performed on the world by the organism, initially in an external motoric sense by the infant and later internally in increasingly complex cognitive operations. At any ontogenetic period these schemes are coordinated in related systems to form overall cognitive structures. Such structures define, according to Piaget, a set of developmental stages with the following properties: distinctive qualitative differences in mode of functioning; arrangement in a universally invariant sequence; each functioning as a structured whole, an underlying form of thought which operates across different situations; and each being a hierarchical integration of previous structures, displacing them by reintegrating their functions. Thus the develop-

mental theory consists of a series of distinct general structures arranged in a hierarchical sequence with an intrinsic logic. The theory makes a central distinction between form and content - the abstract relational principles governing the processing of conceptual material, and the particular problematic material being worked with.

This thumbnail sketch of Piagetian theory is offered as an introduction to the general form of cognitive structural theory and as background to its empirical implications for ego development. Piaget's efforts in his most influential work have been to demonstrate the empirical range and power of this conception and to conceive of the sequence in a way susceptible to formal representation. His theory takes on the appearance of a series of stages in the development of the capacity for logical thought, demonstrable in a variety of problem-solving situations with physical and conceptual materials. Some of his earlier work focussed on areas which we are more accustomed to think of as 'ego' development, the child's conceptions of the social world, but the effects of his later structuralist thinking have been more important both in introducing a new perspective on development in all content areas, and also in influencing a growing school of American researchers who are independently elaborating cognitive developmental theory with respect to socially oriented areas of content. The former direct influence will be addressed first.

The structural transition with which we are concerned in this study is that hypothesised by Inhelder and Piaget (1958) to take place in early to mid-adolescence from 'concrete operational'

schemes to the final stably equilibrated structure of 'formal operations'. At this new level the elements operated on by the structure are no longer 'properties' or 'relations' but 'propositions'. The truth value of statements is thus freed from dependence on the evidence of experience and determined logically from the truth of other related propositions; the system is deductive not inductive.

'Possibility no longer appears merely as an extension of an empirical situation or of actions actually performed. Instead it is reality that is now secondary to possibility'.

(Inhelder and Piaget, 1958, p.251)

This 'possible' world is generated through the use of the complete 'combinatorial scheme'. Sixteen possible combinations of binary propositions can be generated and used in thinking. This propositional thought is not available to the subject at the concrete operational level.

Additionally a flexible unified structure of four transformations is developed - the I.N.R.C. group (Identity, Negation, Reciprocal, Correlative), with those properties necessary to form an algebraic group. These new capacities permit the attainment of novel concepts, such as proportion, probability, correlation, the co-ordination of two systems of reference, and so on.

In the original work nine experiments are designed to trace the development of these new capacities. Generally two substages are distinguished in this transition: A - the development of proportions and the combinatorial structure; and B - the structure of the INRC, and the ability to function at the abstract level, free from direct experience. This research,

however, would be considered exploratory and demonstrative by current scientific standards. Reviews (Neimark 1975; Keating, 1980) point to a surprising paucity of replications considering the influence of this work.

Serious methodological difficulties plague this as an area of research. The finding that it is relatively easy to obtain interrator reliability is no guarantee that there are uniform criteria across investigators. There is a glaring problem of generalising across the published research, which differs in population studied, procedures, and rating criteria employed. There is clear evidence of differential task difficulty which means that there is simply no criteria for 'achieving' the formal level, although there is a consistent positive correlation between the various possible measures. Neimark (1975) concludes: 'It is difficult, therefore, to come forth with a firm generalisation other than that adolescent thought develops from but is different than, child thought.' (p.372)

It is also apparent in reviewing the literature that the original assumption of the Geneva group that formal operations were universally attained by normal adolescents between eleven and fifteen years has not been borne out. Large numbers of subjects, even amongst educated members of technologically advanced nations, fail to perform in the expected way (the percentage varying widely with population and task). Piaget (1972) has admitted this and, in reconsidering, has offered some alternative interpretations of his theory in the light of this evidence.

One possibility is that all people are capable of

attaining the formal level, but some fail to receive sufficient 'cognitive nourishment and intellectual stimulation' (Piaget, 1972, p.8). Or perhaps individuals differ in aptitude to an increasing degree with age, and some people are excluded from the highest levels in the more logical modes of thought. Piaget's preferred explanation is that people do all attain formal thinking, perhaps later than he first thought, say up to twenty years old, but they use these structures in rather different ways with respect to different experimental situations and materials by virtue of a specialisation in personal experience.

Other authors have questioned the clear distinction between 'competence' and 'performance', and de-emphasise a formal-logical interpretation of structure. Pascuale-Leone (1969) and Neimark (1977) suggest that 'performance' components such as cognitive style are intrinsic to theories of thinking and that methodological factors may have biased Piaget's results towards giving precedence to analytic modes of thought. The analytic view of cognition has been criticised as misrepresenting mature thinking. Riegel (1973) and Arlin (1975), for example, propose additional cognitive stages.

Such speculative proposals aside, it appears that the evidence is currently confused and open to many interpretations. It does seem clear that there are significant developments in the form of adolescent thinking, and that there are individual differences in the manner and results of this progression. This means that the cognitive developmental perspective potentially takes on the character of a personality variable in a way not originally intended. For our purposes the major question is how such understanding as we have of these processes may be linked

to a theory of general ego development.

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Inhelder and Piaget (1958) speak briefly but provocatively about the relationship between the emergence of these new logical capacities and development in the social realm: 'The structural transformation is like a center from which radiate the various more visible modifications which take place in adolescence' (p.335). A set of ideal-typical characteristics of adolescent personality development are related to this 'core' by Piaget and his later elaborators (e.g. Elkind 1969 a, 1969 b; Osterreith 1969). Such characteristics as: 'orientation toward the future and preoccupation with a life plan, orientation toward ideology, criticism of established institutions, and commitment to future changes, emphasis on the internal life with its correlated romanticism, mysticism and individualism.' (Blasi and Hoeffel, 1974, p.345). (In the present study we condense these for operationalisation into three major components: future time perspective; social-ideological orientation; and introspectiveness).

How are these new features of experience related to formal structures? The capacity to subordinate the real to the possible is essential to formal hypothetico-deductive thought. This constitutes an important freeing of thought from the constraints of what exists and has been experienced in one's socialisation. Hence one can project - or hypothesise - beyond the immediate both in terms of planning one's own future life, and also of considering things in an historical light and of gaining perspective on current social conditions by creating idealised possibilities. Idealisation in the romantic and spiritual sense are also frequently present in the adolescent's

thoughts about himself and others. And this capacity to see oneself, to reflect, can be related to the other major feature of formal structures, their propositional character which involves a kind of thinking about thinking, a reflectivity.

If the central importance of logical structure to adolescent experience is accepted, then the question of the implications of the discovered non-universality of formal operations must be addressed. Perhaps the ideal-typical 'adolescent experience' is not universal. Kohlberg and Gilligan (1971) seem to support this position. Or perhaps, as suggested above, our assessment of the presence of underlying formal structures is deficient.

However this interpretation of the structural relationships involved has not gone unchallenged. Blasi and Hoeffel (1974) question the relevance of Piaget's theory to social cognition. They suggest that the concepts of 'possibility' and 'reflectivity', at the core of this view of adolescent thinking, have different meanings in the sphere of social development than they do within the specialised context of the theory of formal operations. To have a sense of possibility, they claim, it is not essential to have the ability to analyse the implicit structure of situations. It is more important to have experience of diverse social situations, the concrete self knowledge arising from this, and the experience of making real personal choices. 'Reflectivity' as used in regard to formal structures refers to the use of first-degree cognitive relations in second-degree propositions. This is not at all the same as taking one's own thought processes as content for reflective thinking, nor as having a new cognitive relation to one's own self-conceptions.

What is most surprising is the total lack of direct evidence bearing on this relation between formal operations and these 'content' aspects of adolescent personality. This study addresses itself to that question. So far the debate has remained theoretical, but Blasi and Hoeffel's arguments are powerful ones. They conclude that the relevant cognitive structural theories are those which are concerned directly with the development of the concept of the self during this period. An early such theory is Nixon's (1962) idea of 'self-cognition' as the novel feature of adolescent experience. Kohlberg and Gilligan (1971) seem to base their ideas of epistemological development on a new relationship between self and world. In fact a whole tradition of social-cognitive developmental theory has emerged based on the Piagetian model.

Social and Moral Development

In fact a growing number of researchers have been extending and integrating these insights with different materials in different content domains - 'guided not by a theory but by an approach labelled cognitive-developmental' (Kohlberg et al. 1977, part 1, page 1). This literature deals with social cognition, echoing the work of the early Piaget (e.g., 1932) in subject matter, but integrating some of the insights of Baldwin (1879) on role-taking as the basis of social development, and employing the constructivist epistemology and the strict structuralist formalism of Piaget's later work.

Such theories attempt to map out the development of an increasingly equilibrated conception of the social world in terms

of a set of naturalistic stages which meet the criteria of qualitative difference, invariant sequence, structured wholeness and hierarchical integration (Kohlberg, 1969). That this world is a 'social' world involves a further series of assumptions, based on Baldwin's ideas, beyond the strictly Piagetian (Kohlberg et al., 1977, part 1, p.3): the affective and cognitive realms are not distinct, but different perspectives on structural change; there is a fundamental unity of personality organisation and development called the ego or self; social cognition involves role-taking, the awareness that the other is in some way like the self, and that the other knows or is responsive to the self in a system of complementary expectations; changes in the conception of self and of the world are parallel; equilibration in development leads towards greater reciprocity between the self's actions and those toward the self.

Kohlberg's work in the area of moral reasoning (Kohlberg 1959, 1969, 1975) is the best known and most successful of this kind, but several other areas have been studied in similar fashion: faith (Fowler, 1974), defences (Chandler, 1978), role-taking (Selman, 1971), self and peer relationships (Selman and Jacquette, 1977 b), and so on. The relationships amongst these schemes is considered in a later section. Here Kohlberg's scheme, the one used in the present study, is considered in detail (see table 1).

This descriptive scheme and its associated 'clinical' assessment methodology in their present form are the outcome of twenty years of work by Kohlberg and his associates. It is useful and important to understand the nature of this development for a thorough grasp of the status of their structural conception of

TABLE 1: THE SIX MORAL STAGES
 adapted from Kohlberg (1975)

Content of Stage

Level and Stage	What is Right	Reasons for Doing Right	Social Perspective of Stage
LEVEL A - PRECONVENTIONAL Stage 1 - Heteronomous Morality	To avoid breaking rules backed by punishment, obedience for its own sake, and avoiding physical damage to persons and property.	Avoidance of punishment, and the superior power of authorities.	Egocentric point of view. Doesn't consider the interests of others or recognize that they differ from the actor's; doesn't relate two points of view. Actions are considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.
Stage 2 - Individualism, Instrumental Purpose, and Exchange	Following rules only when it is to someone's immediate interest; acting to meet one's own interests and needs and letting others do the same. Right is also what's fair, what's an equal exchange, a deal, an agreement.	To serve one's own needs or interests in a world where you have to recognize that other people have their interests, too.	Concrete individualistic perspective. Aware that everybody has his own interest to pursue and these conflict, so that right is relative (in the concrete individualistic sense).

Table I, continued

Content of Stage

Level and Stage	What is Right	Reasons for Doing Right	Social Perspective of Stage
LEVEL B - CONVENTIONAL Stage 3 - Mutual Inter- personal Expectations, Relationships, and Inter- personal Conformity	Living up to what is expected by people close to you or what people generally expect of people in your role as son, brother, friend, etc. "Being good" is important and means having good motives, showing concern about others. It also means keeping mutual relationships, such as trust, loyalty, respect, and gratitude.	The need to be a good person in your own eyes and those of others. Your caring for others. Belief in the Golden Rule. Desire to maintain rules and authority which support stereotypical good behaviour.	Perspective of the individual in relationships with other individuals. Aware of shared feelings, agreements, and expectations which take primacy over individual interests. Relates points of view through the concrete Golden Rule, putting yourself in the other guy's shoes. Does not yet consider generalized system perspective.
Stage 4 - Social System and Conscience	Fulfilling the actual duties which you have agreed. Laws are to be upheld except in extreme cases where they conflict with other fixed social duties. Right is also contributing to society, the group, or institution.	To keep the institution going as a whole, to avoid the breakdown in the system "if everyone did it," or the imperative of conscience to meet one's defined obligations. (Easily confused with Stage 3 belief in rules and authority; see text.)	Differentiates societal point of view from interpersonal agreement or motives. Takes the point of view of the system that defines roles and rules. Considers individual relations in terms of place in the system.

Table I, continued

Content of Stage

Level and Stage	What is Right	Reasons for Doing Right	Social Perspective of Stage
LEVEL C - POST-CONVENTIONAL, or PRINCIPLED Stage 5 -- Social Contract or Utility and Individual Rights	Being aware that people hold a variety of values and opinions, that most values and rules are relative to your group. These relative rules should usually be upheld, however, in the interest of impartiality and because they are the social contract. Some nonrelative values and rights like life and liberty, however, must be upheld in any society and regardless of majority opinion..	A sense of obligation to law because of one's social contract to make and abide by laws for the welfare of all and for the protection of all people's rights. A feeling of contractual commitment, freely entered upon, to family, friendship, trust, and work obligations. Concern that laws and duties be based on rational calculation of overall utility, "the greatest good for the greatest number."	Prior-to-society perspective. Perspective of a rational individual aware of values and rights prior to social attachments and contracts. Integrates perspectives by formal mechanisms of agreement, contract, objective impartiality, and due process. Considers moral and legal points of view; recognizes that they sometimes conflict and finds it difficult to integrate them.
Stage 6 - Universal Ethical Principles	Following self-chosen ethical principles. Particular laws or social agreements are usually valid because they rest on such principles. When laws violate these principles, one acts in accordance with the principle. Principles are universal principles of justice.	The belief as a rational person in the validity of universal moral principles, and a sense of personal commitment to them.	Perspective of a moral point of view from which social arrangements derive. Perspective is that of any rational individual recognizing the nature of morality or the fact that persons are ends in themselves and must be treated as such.

moral reasoning. In the original research Kohlberg (1959) isolated six orientations among children, in late childhood and adolescence, in their reasoning on nine moral dilemmas. This description is clearly guided by an implicit structural developmental conception but there could be only suggestive evidence for it at that time, and the number of orientations described was admittedly 'arbitrary' in empirical terms. They were 'ideal types', and responses were signs of the 'general pattern' of a stage (Kohlberg et al., 1977). Assessment materials and scoring remained unstandardised for several years, and so research studies done at that time were often not comparable with each other (see Kurtines and Grief, 1974).

Longitudinal validation studies (Kohlberg and Kramer, 1969) revealed certain defects in the scheme: inversions (from stage 4 to stage 3), skipping (from stage 3 to stage 5), and an important college age regression (from stage 4 to stage 2). These were later interpreted as the result of too much extraneous content in the stage definitions, and the scheme was redefined along broadly similar lines, but with a more refined and rigorous conception of the nature of structure. This may be most clearly understood in terms of the concomitant 'social perspective' of a moral stage, an idea based on Selman's (1971) work on role taking (see the relevant section in table 1).

The inadequacies of the previous scheme were most significant in the definition of the higher stages. Stage 4 is redefined as a 'social system perspective' rather than 'law and order', a content which can occur at Stage 3. The post-conventional stages 5 and 6 are more rigorously defined as, a beyond, or prior to, society perspective. The stages are forms

of thought not types of values. The overall effect is to shift the scoring of many responses downwards.

This is the scheme employed in the 1972 'structural issue rating' manual, but this global rating format was insufficiently reliable and has been developed into the current 'standard form scoring' with the intention of strengthening its psychometric properties (Kohlberg et al., 1977). This format is regarded by the Kohlberg group as the final form, the outcome of their research program (Kohlberg, personal communication).

The validity of the moral development scheme is still, to some extent, an open question given its as yet incomplete quality. A highly critical review by Kurtines and Grief (1974) proves to be rather spurious; they accurately point to deficiencies in the early scoring formats and in Kohlberg's publication practices but misrepresent evidence on the present status of the scheme. A problem in assessing the evidence is that with the revision of the scheme earlier validity work on the meaning of the stages is compromised. Reviews by Broughton (1975) and Gibbs (1977) point to a strongly favourable balance of studies which provide evidence on relevant structural criteria.

The developmental sequentiality of the stage scheme ultimately depends on long term longitudinal data. Kohlberg is following up his dissertation subjects over twenty years; these data have not yet been published but are reported to be supportive of the theory so far (see Brown and Herstein, 1975, pp.315-318). Results of experimental interventions designed to effect small stage changes have found results consistent with a hierarchical sequence (Turiel 1966; Rest, Turiel, and Kohlberg 1969; Keasey,

1973; Tracey and Cross, 1973; Arbutnot, 1975). Similarly, educational discussion groups have produced the predicted pattern of changes (Blatt and Kohlberg, 1975; Hickey, 1972; review by Rest, 1974). Regarding the cross-cultural universality of the scheme, Simpson (1974), although critical of aspects of the theory admits that the research is 'suggestive'; and Edwards (1975) and White (1975) obtain consistent results in addition to Kohlberg's (1969) own work. The 'structured wholeness' of stages has been improved by the new scoring scheme, and Kohlberg et al. (1977) report that 75% of most subjects' responses are at their modal stage. Older results by Turiel (1969) found that modal stages could generally be identified even at periods of rapid development. Rest's (1973) data on comprehension of and preference for statements at different stages is supportive of the theory's claims about 'hierarchical integration' of structures. Non-'structural' evidence regarding the relationship of moral level to real-world choice and action, although pertaining mostly to earlier versions of the scheme, is also suggestive of further support (Milgram, 1974, p.205; Krebs, 1967; Krebs and Rosenwald, 1977; Haan et al., 1968).

This array of evidence, however, applies chiefly to the first four stages in Kohlberg's six stage scheme. One important advance of the theory over the earlier Piagetian research was the apparent discovery of an additional further major transition in moral development during adolescence. This is the period with which we are concerned in our study; it is also the point at which Kohlberg's work has been subject to the greatest controversy and his thinking undergone the greatest revision.

Originally the moral orientations were: upholding law and social order (4); social contract as a basis for human rights (5); and fundamental universal principles of justice (6). Each of these were to be found in high school populations, and they were conceptually extrapolated from this age group. The crucial longitudinal validity study (Kohlberg and Kramer, 1969) uncovered a theoretically anomalous regression in college age subjects who had been stage 4, 5 or 6 in high school but who apparently reverted to a stage 2 mode of egoistic hedonism in which they asserted the need of everyone to 'do their own thing'. Later testing showed each of these subjects to have returned to an overall higher level of reasoning shortly after they had left college. These results were interpreted as a structural regression in the service of a functional advance. These young people were aware of advanced moral principles but lacked a personal commitment to employing them in real situations of personal choice and responsibility. The regression allowed a stabilisation of the moral structures, but more importantly gave the opportunity for 'ego development' in a 'functional' Eriksonian sense.

This 1969 interpretation provides no evidence of uniquely adult moral development; all the levels of thinking are potentially available from early adolescence. The retrogression however seemed to be at variance with the strict formal requirements of structuralist stage theory. Turiel (1973) pointed out that the disequilibrium of transition is different from the disorganisation of regression, and from this idea came an interpretation of this college age thinking as 'stage 4½', a combination of relativism and ethical egoism which identifies

morality as stage 4 thought and questions its validity. This transition is a route to forming what is now seen as a new adult phase of development, the establishment of principled modes of thinking unavailable in adolescence (Kohlberg, 1973).

It should be clear that this demands a revision of the scoring scheme, to a degree that cannot be lightly glossed over. In this view none of the longitudinal subjects displayed true stage 5 thought under twenty three years, and none have reached stage 6. In fact, stage 6 is no longer scored in the current manual. These post-conventional stages are a development customarily occurring in the mid and late twenties, not in adolescence. The scoring situation, however, seems complex to the point of confusion. Some fine distinctions are presented (Kohlberg et al., 1977, part 1, pp.26-27) but are not scored as such. '4 $\frac{1}{2}$ ' apparently shows up as an anomalous scattering of stage scores and is scored from subsidiary 'meta-ethical' questions. Not everyone passes through this phase and the developmental situation is at best unclear.

It is apparent that the evidential base of the post-conventional stages has altered radically, while the stages have maintained a semblance of continuity. This raises the suspicion of ideological preference overriding empirical induction and Kohlberg's concept of the moral realm (Kohlberg, 1971) has been subject to such criticism from various standpoints, as being biased culturally (Simpson, 1974), sexually (Gilligan, 1977) and politically (Sullivan, 1977).

The area seems potentially open to different interpretations which might be of greater generality and give order to these confusions. For instance, Gibbs (1977) essentially

proposes discarding the attempt to produce a naturalistic developmental hierarchy beyond the conventional level; post-conventional thought is 'disembedding oneself from an implicit world view' (p.10) which involves reflective formalisation not structural change. Gilligan and Murphy (1977) elaborate the developmental conception, suggesting two levels of relativism, a rebellious adolescent form and a mature post-conventional form based on the contextuality of knowledge and personal choice.

It is clear at least that the development of social cognition in young adults is not as clear cut as the earlier Kohlberg scheme made out. Essential elements in the experience of this age group which are consistently given importance by both Kohlberg and his sympathetic critics are reflection and personal commitment. These concepts create a link to the wider domain of 'ego development', both in Erikson's sense and that of a structuralist tradition related to Kohlberg's but broader in conception, that of Loevinger.

Ego Development (Loevinger)

The work of Loevinger (1966, 1976) explicitly represents a synthesis of a tradition of theory wider ranging than does Kohlberg's, encompassing Adler (1956), Sullivan (1953), and the ego psychoanalysts. The range of content encompassed is consequently broader and the theoretical specification rather looser, but the material is reinterpreted in similar cognitive structural terms, refining earlier related attempts by Harvey, Hunt and Schroeder (1961), Isaacs (1956), Peck and Havighurst (1960), Sullivan, Grant, and Grant (1957). These theories focus

on the individual's overall frame of reference and the integrative processes used to interpret the self, the social world and interpersonal relations. Each posits an abstract continuum of increasingly differentiated frameworks of meaning.

This is a conception so broad and so abstract that it is not readily appreciated in a general definition. Loevinger (1966) prefers a 'pointing definition' of what 'ego development' refers to, through an outline description of her stage model (see table 3). These levels of development are 'milestones', emergent abilities and changes in focus, on an underlying continuum. The theory is less formalistic and lacks the strictly logical subordination between stages found in cognitive developmental theories applying to limited content domains.

Central to this effort to integrate a research tradition has been the derivation of a measurement instrument. A sentence completion methodology was selected and the test, its scoring manual, and the theoretical scheme itself have undergone a process of iterative development and refinement (Loevinger and Wessler, 1970). Consequently the psychometric properties of this methodology have received careful study and attention in a way which the Kohlberg procedures have not until recently.

There is none of the confusion associated with the meaning and comparability of studies of moral development, but the number of tests of the validity of Loevinger's work is relatively small. Those which exist are on balance favourable and promising (see Hauser's (1976) review). There is a major difference in focus between the Loevinger and Kohlberg approaches. The latter, more strictly Piagetian, is concerned primarily with the developmental aspects of the theory, and validity is pinned

TABLE 2. SOME MILESTONES OF EGO DEVELOPMENT
from Loevinger (1976)

Stage	Code	Impulse Control, Character Development	Interpersonal Style	Conscious Preoccupations	Cognitive Style
Presocial			Autistic		
Symbiotic	I-1		Symbiotic	Self vs. non-self	
Impulsive	I-2	Impulsive, fear of retaliation	Receiving, dependent, exploitative	Bodily feelings, especially sexual and aggressive	Stereotyping, conceptual con- fusion
Self-Protective	Δ	Fear of being caught, externa- lizing blame, opportunistic	Wary, manipulative, exploitative	Self-protection, trouble, wishes, things, advantage, control	
Conformist	I-3	Conformity to external rules, shame, guilt for breaking rules	Belonging, super- ficial niceness	Appearance, social accept- ability, banal feelings, behaviour	Conceptual simplicity, stereotypes, clichés
Conscientious- Conformist	I-3/4	Differentiation of norms, goals	Aware of self in relation to group, helping	Adjustment, problems, reasons, opportunities (vague)	Multiplicity
Conscientious	I-4	Self-evaluated standards, self- criticism, guilt for consequences, long-term goals and ideals	Intensive, respon- sible, mutual, concern for communication	Differentiated feelings, motives for behaviour, self-respect, achieve- ments, traits, expression	Conceptual com- plexity, idea of patterning

Table 2, continued.

Stage	Code	Impulse Control, Character Development	Interpersonal Style	Conscious Preoccupations	Cognitive Style
Individualistic	I-4/5	Add: Respect for individuality	Add: Dependence as an emotional problem	Add: Development, social problems, differentiation of inner life from outer	Add: Distinction of process and outcome
Autonomous	I-5	Add: Coping with conflicting inner needs, toleration	Add: Respect for autonomy, inter- dependence	Vividly conveyed feelings, integration of physio- logical and psychological, psychological causation of behaviour, role conception, self-fulfillment, self in social context	Increased con- ceptual complex- ity, complex patterns, toleration for ambiguity, broad scope, objectivity
Integrated	I-6	Add: Reconciling inner conflicts, renunciation of unattainable	Add: Cherishing of individuality	Add: Identity	

NOTE: "Add" means in addition to the description applying to the previous level.

to these - stage and sequence as Kohlberg (1969) calls them. While these same structural-developmental characteristics are also inherent in Loevinger's theory she intends it primarily as a characterology. Knowing that people may progress at different rates and halt anywhere along the line of development, it may be understood as a continuum of individual differences.

Validity work has concentrated on this way of looking at the scheme. It appears that those studies which have tended to look for gross overall relationships to other relevant variables have produced confused and ambiguous results. For example, Cox (1974) examined children's helping behaviour predicting an increase with ego development; and Haan et al. (1973) studied psychiatric 'ego process' variables in 'hippies'. Findings of both studies were inconclusive. However studies which have made stage relevant predictions on a theoretically derived basis have been more successful. Blasi (1972) demonstrated developmental differences in the mode of responsibility taking in role plays. Hoppe (1972) predicted and found a non-monotonic relationship with conformity behaviour.

This individual differences approach can be the source of a significant new viewpoint on age specific developmental questions. Loevinger refuses to give age norms for the transitions in her scheme. Thus the ideal typical characteristics of a developmental period are not identified with particular ego developmental stages or transitions as they are to some extent for Kohlberg. One may consider instead the possibility of different forms of age-typical experience and multiple developmental patterns on the basis of this individual difference conception of ego development.

There is not a lot of research relevant to this approach, however. Goldberger (1975) is following the adjustment and reaction to extracurricular life of college students and is reported to find differences based on ego development. An early paper by Cross (1967) uses the Harvey, Hunt, and Schroeder (1961) model to postulate the probable characteristics of experience and behaviour in early adolescence with differing levels of structural development and suggests that different helping environments are necessary at different stages. Josselson et al. (1975) in a phenomenological study of adolescents at high and low levels on Greenberger et al.'s (1975) quasi-structural scale of psychosocial maturity, find increases in impulse control and self-esteem, and gains in autonomy at higher developmental levels. This idea of an individual difference model derived from developmental theory then reapplied to a developmental period is central to the present study.

A further developmental application of Loevinger's scheme to college age subjects is its reported moderate correlation (Farrel, 1974) with an interview derived scheme of development in the structural tradition by Perry (1969). Perry's is a brilliant and provocative attempt to systematise the experience of college students in terms of a progression of epistemological structures (see Appendix C).

Unlike most structural schemes Perry includes the influence and operation of more psycho-dynamically based factors: the effect of the students' tendency to be in adherence or opposition to authority and sources of knowledge; the difficulty and confusion which results from facing the responsibilities implied by the multiplicity of viewpoints and the relativity of

values; the possibility of employing defensive tactics by 'retreating' to earlier more secure stages, or 'escaping' by denying the implications for growth of intermediate positions. Little further research has attempted to validate this scheme, but its richness of conceptualisation is a source of ideas drawn upon in analysing the interview data in the present study. It explicitly raises the issue of the interrelation of these differing facets of the process of ego development.

Ego Development: Integrative Perspectives

It would be unfortunate if the meaning of the term ego development were assimilated to Loevinger's particular theory. Her general definition of the field can be accepted but her particular scheme of stages considered to be just one contender for how best to organise it conceptually. As suggested earlier in this chapter, the 'ego' is best left as a broad encompassing category. A theory of ego development, then, examines the organisation and ontogenetic patterning of peoples' modes of understanding themselves and their world. It outlines the process of integrating experience in meaningful ways to create coherent frames of reference, and how such frames are used to structure new experience.

All the theories which we have described so far are ego developmental in this sense. But how do they relate to each other? Does one theory include all the others, or must they be put together to form a complete picture? Do they deal with different aspects of development? Are they basically similar, or do they clearly differ on the facts at some points? The present

study is concerned to investigate such questions as these. This section examines the range of answers which have been given to them, in order to generate a framework for empirical investigation.

For Kohlberg et al. (1977) the theory of moral development is now seen as one part of the wider context 'ego development':

'There is a fundamental unity of personality organisation and development termed ego, or the self. While there are various strands of social development (psychosexual development, moral development etc.) these strands are united by their common reference to a single concept of self in a single social world. Social development, in essence, is the restructuring of the 1) concept of self, 2) in its relationship to concepts of other people, 3) conceived as being in a common social world with social standards.'

(part 1, p.2).

The essence of social development, it is claimed, is 'role taking'. But this overall unity is to be thought of as composed of various 'strands' of development, each strand being defined by some domain of context. 'Ego development' can be schematised as a matrix: structured stages crossed with 'strands' or content domains.

This approach stems from the rigorously structural approach of the theorists who follow Piaget closely. In order to define stages in a progression that has an inherent logic which can be stated formally, but can still be specific enough to be recognisable empirically, it becomes necessary to restrict the domain of application of the theory. So this general scheme of ego development can be seen as a consequence of a particular theoretical predisposition. It may or may not prove to be empirically the most useful.

The question that is raised by this streams-stage matrix theory is what relationships obtain between cells. Are there some principles of ordering within the matrix? The working answer of the Kohlberg group (e.g. Kohlberg, 1975) is that certain rules of logical implication seem to be operative. Stages correspond to each other across domains in terms of basic structure, but some domains are in a sense more fundamental than others and constitute necessary but not sufficient pre-conditions for development in other domains. So it is between logical development and social perspective taking, and between perspective taking and moral judgement (see table 3). In each case the capabilities of one domain seem to be required by the other but there are further elements of experience and judgemental complexity involved.

This is in contrast to Piaget's original position, described above, which asserts the 'functional unity' of all aspects of cognitive structural development across a range of different domains (Piaget and Inhelder 1969). Differences may exist between domains but this would be the developmental consequences of specialised experience with particular content areas. That is, there may be some 'horizontal décalage' between different domains or across particular tasks but no general theory of the effect of such 'resistances' of materials to structural development should be possible (Piaget, 1972).

The attention in the present study is in the relationship between the domains of logical development and moral reasoning. The research evidence has generally confirmed the expected existence of a moderate positive correlation in the range of .4 to .6 between these two 'streams', and shown that it

TABLE 3

Theoretical Stage Correspondence
between Logical, Perspective Taking,
and Moral Development

from Kohlberg (1976)

Moral Reasoning	Perspective Taking	Logical Operations
Stage 1	Stage 1	Pre-operational
Stage 2	Stage 2	Concrete operations
Stage 3	Stage 3	Beginning formal operations (relations as simultaneously reciprocal)
Stage 4	Stage 4	Early basic formal operations (ordered triads of propositions)
Stage 5	Stage 5	Consolidated basic formal operations (isolation of variables deductive hypothesis testing)

NOTE: in Kohlberg and Gilligan (1971): Stage 1 corresponded to concrete operations sub-stage 1 (categorical classification), and stage 2 to concrete operations sub-stage 2 (reversible invariant relations).

is not merely an artefact of age. Arbuthnot (1973) reported low to moderate correlations between Kohlberg's moral judgement and a variety of reasoning tests in adolescents. Langford and George (1975) showed a positive correlation in early adolescent girls between a written Kohlberg test and scores on a formal operations problem (floating bodies). Miller, Zumoff and Stevens (1974) with a sample of delinquent, retarded and normal adolescent girls failed to find a relationship between a variety of Piagetian tasks and moral reasoning, but the moral scoring was on Piagetian lines rather than following Kohlberg's scheme. Lee (1973) also did not use the Kohlberg scheme but one analogous to it; in a sample covering a wide age range of children (5 to 17 years) he found a positive correlation with Piagetian stages, and that there was a general correspondence between pre-operational thinking and authority orientation, between concrete operations and co-operation and reciprocity, and between formal operations and societal and ideological morality. Cauble (1976) demonstrated a moderate correlation of .4 between Piagetian logical stages on three formal operations tasks and Rest et al.'s (1974) test based on Kohlberg's scheme.

But to address the issues of the nature of ego development it is necessary to go beyond this correlational analysis to an examination of the form of the relationship in greater structural detail. A number of studies attempt to discover the nature of such orderly décalage, or developmental preconditions. Tomlinson-Keasey and Keasey (1974) studying sixth grade girls and college co-eds found that formal operations increased the chance of being at a conventional moral level in the girls, and was necessary to have reached a principled level in the students,

a result upheld in the 'majority' of cases. They concluded that: 'Sophisticated cognitive operations are a pre-requisite to advanced moral judgement and there is a lag or décalage between the acquisition of logical operations and their application to the area of morality' (p.291). Krebs and Gilmore's (1980) findings for the earlier stages of cognitive and moral development in a sample aged five to fourteen years, were also supportive of a consistent form in the décalage but only after a re-assessment of early stage correspondences in line with Damon's (1977) analysis, rather than Kohlberg's (1976) proposals (table 3). Damon's suggestions lower the moral stages by a 'substage' against both perspective taking and logical reasoning.

Kuhn et al. (1977) is currently the definitive study concerned with this relationship in the adolescent and adult stages. A large sample (265 subjects between the ages of 10 and 50 years), and a smaller sample of pre-adolescents studied longitudinally over two years, were rated on several formal operations tasks and on the revised Kohlberg moral judgement scheme. Their results suggest very strongly that the emergence of formal operational thinking was necessary for the emergence of principled moral thinking. It would appear to have also been necessary for the consolidation of 'pure' stage 4 reasoning, but the authors are more sceptical of this considering the smaller numbers involved and the lack of clear theoretical rationale for its importance in 'consolidating' stage 4. The authors point out that the clearest finding of the study is the consistent décalage between the two domains, in that formal operations in no way guarantees the advancement to principled moral thought. While 85% of the

subjects showed some formal operational thinking, only 21% showed any principled moral reasoning. However it is far from clear what 'décalage' means in this context in so far as Kohlberg (see table 3) does not predict that formal operations (defined by Kuhn et al. as any emergence of these abilities in transitional or beginning formal operations) should be necessary for stage 5, but for stages 3 or 4 which in Kuhn's results it clearly was not.

A final approach to the relationship between these variables has been intervention studies investigating the pre-conditions for moral development in response to efforts at moral education. Colby (1973) found that preadolescent subjects in transition to formal operations (or higher) were more likely to show moral development in response to discussion groups regardless of their initial moral levels. Faust and Arbuthnot (1978) found that college students at moral stage 3 who were formal operational on a written test made significantly more response to moral education groups than those who were concrete operational, tending to acquire stage 4 moral structures. Walker (1980) found that fourth to seventh grade children acquired stage 3 moral reasoning after role-play 'exposure' to it only when they had the 'prerequisites' of 'beginning' formal operations (assessed on verbal seriation and logical absurdities tasks) and Selman's stage 3 perspective taking ability. Walker and Richards (1979) found that with female adolescents at moral stage 3 such exposure to the 'plus 1' reasoning of stage 4 produced development only for those at 'early basic formal operations' (assessed on the pendulum and chemicals tasks, as in the Kuhn et al. (1977) study). Clearly however, such limited

intervention studies on young subjects must be interpreted with care. It seems clear from this evidence that the early stages of formal operational thought are facilitative of response to moral education, and that Walker's two studies are supportive of Kohlberg's position regarding specific stage correspondencies and developmental priorities. Kuhn et al.'s study does not assess 'beginning' formal operations, but does show subjects at stage 4(3) without the requisite formal operational ability on the tasks used to assess it.

It has been further proposed that perspective taking ability (Selman, 1971) occupies an intermediate position between logical and moral reasoning in the matrix of ego development; it depends on logical structures, but is an additional prerequisite for moral development. Research on this relationship (Ambron and Irvin, 1975; Moir, 1974; Rubin and Schneider, 1973; Krebs and Gilmore, 1980; Perry and Krebs, 1980; Selman, 1971; Damon, 1977; Tracey and Cross, 1973; Walker, 1980) again generally demonstrates a positive relationship between constructs, but also shows similar problems regarding the precise form of the relationship: problems defining and operationalising the constructs equivalently, and disagreements regarding the proposed stage correspondencies. Damon's (1977) revision of the early stages is supported by Krebs and Gilmore (1980) and Perry and Krebs (1980), but evidence is lacking regarding the later stages.

In general the other candidates for the content domains columns of the 'streams theory' matrix, a growing number, have not been thoroughly researched in relation to other structural theories. Nor have conditional relationship hypotheses been suggested for them, and it is far from clear

that they could be. The danger of this streams point of view is a proliferation of coding schemes for different domains bearing no clear relation to each other or to a coherent conception of ego development. Generally the necessary distinction between *décalage* (expansion of the same structure to new content), and genuine 'structural' development proposed by Kohlberg et al. (1977) is at best murky. It needs further articulation. The relevant research - currently lacking - would be detailed experimental or longitudinal study of the conditions for development in particular domains.

Damon (1977) proposes a related but more flexible view of the development of 'social knowledge'. He studies particular concepts in fine-grained detail, and suggests that they can be understood in terms of the operation of general and partial structures, and specific organising principles unique to a content domain. Conceptual associations between different areas are dependent not only upon the extent to which common developmental structures are required by each, say which modes of classification or which form of perspective taking, but also the extent to which direct and particular conceptual affiliations exist between the content areas, possibly arising from specific social concerns perhaps obtaining at all levels of the concepts. This view implies that although at a formal analytic level it should be possible to specify 'necessary' structural conditions for the development of some conceptual ability this need not mean the precise specification of 'ontogenetic priority'; an individual can develop the 'necessary' structural capacity in some area without having developed it in another area, say physico-mathematical problems, and 'applied' it to this new

area of competence, say moral reasoning (or some more specific moral concept). However where there is 'basic organisational continuity', development in one area 'informs and supports' development in another and results in 'predictable conceptual affiliations' (Damon, 1977, p.300). This view appears to be a more flexible version of Kohlberg's (1976) position, and better specified than, but still compatible with, Piaget's (1972) view of social development.

This position appears to be similar to that of Selman and Jacquette (1977a). They propose 'perspective taking' as the core of social development (see table 1) but have gone on to create three further schemes (on the self, friendship, and group dynamics) which are particularisations of this general structure. They no longer propose to measure the 'core structure' directly, but only its manifestation in such particular areas. Interesting questions then become what are the conditions of development in particular areas, what generally is the degree of consistency of a structural network, and do areas interact to affect 'oscillation' of structure over time and situations? Kuhn et al. (1977) talk about cognitive operations as a 'network of interactive and co-regulative structures' (p.178) involving reciprocal stimulation. A description of such interactions may prove to be more complex and idiographic than statements of logical priority. These questions demand exploratory investigation which might suggest the relevant parameters.

A step further away from the 'streams' view is Loevinger's position. Here the structures are referred to as 'levels' to highlight their general quality and lack of a tightly articulated

logic of progression. Structural consistency cannot be broken down further than this general level and consequently it is spurious to search for and formalise some 'core'. Rather ego development is a diverse and all encompassing evolution. This argument can be supported by the internal consistency of the Washington University Sentence Completion Test (Redmore and Waldman, 1975); an attempt to form a sub-factor predictive of moral judgement scores failed (Lambert, 1972). This could of course point alternatively to a general weakness in this assessment methodology.

The relationship of Loevinger's scheme to other structural schemes in terms simply of degree of correspondence between their respective stages is less clear than might be expected. There appears to be a theoretical disagreement between the correspondencies proposed by Loevinger and by Kohlberg to exist between their respective schemes (see table 4). The Kohlberg table is prior to the 1972 revision of the scheme. The Loevinger version, though given after seems to rely on the earlier stage descriptions. It is apparent from table 4 that at the higher stages Kohlberg rates his own stages as more advanced than Loevinger sees them.

Some research is available on this question but none provides contingency tables or attempts to specify stage correspondencies. Only overall correlations are provided. These are positive and significant but not consistent. Sullivan et al. (1970) report a correlation between moral reasoning and ego development of $r = .66$ (.40 with age partialled out) in a sample of one hundred and twenty female adolescents (twelve to seventeen years). Lambert (1972) from a sample of one hundred and

Hypothesised Interrelationship
of Ego Development and
Moral Reasoning Schemes

According to Loevinger (1976)		According to Kohlberg (1969)	
I 2	equivalent to stage 1	I 2	equivalent to stage 1
Δ	equivalent to stage 2	Δ	equivalent to stage 2
I 3	equivalent to stage 3	I 3	equivalent to stage 3
I 3/4	equivalent to stage 4	I 4	equivalent to stage 4
I 4	equivalent to stage 5	I 5	equivalent to stage 5
I 4/5	equivalent to stage 6	I 6	equivalent to stage 6

seven of both sexes spanning a wide range of age (fourteen to sixty years) and education, reports, $r = .80$ (.60). Haan et al. (1973) in their study of fifty-eight male and female 'hippies' (sixteen to thirty-five years) report that 90% of their subjects were ego level I3/4 or above, while 90% were moral stage 3 or below, but fail to report the correlation; Hauser (1976) suggests that the correlation is probably quite low in this study since each score relates to different aspects of other 'ego functioning' data. The Haan et al. (1973) study does seem to indicate that any stage correspondencies between the schemes would place Kohlberg's stage scores as (numerically) 'below' Loevinger's, but with the 'hippy' subjects of this study the older versions of the moral judgement scheme may have tended to underscore a considerable percentage. All these studies employ earlier versions of the Kohlberg scoring scheme; no data with the current version are available. Neither research nor theory appears to have related Piaget's logical stages to the Loevinger scheme. These gaps in the literature are surprising and regrettable.

Thus a progression of levels of cognitive complexity is the basic idea of all such theories but there are ways to expand on it, and it is as yet unclear how to integrate our understanding of different manifestations of progression in different areas of content. When one tries to relate these structural conceptions to other forms of theory the situation becomes yet more complex and potentially confused.

Socialisation theories are regarded by Kohlberg as pertaining to the 'content' of thinking and, in particular for

him, the values and norms that are appealed to in moral justifications; he seems to see these as of little theoretical interest. However a growing criticism of cognitive developmental theory concerns the downplaying of the 'figurative' over the 'operational' in thinking (Turner, 1973), the emphasis on the universal, impersonal and ahistorical over the immediate individual situation (Sullivan, 1977) and the over-restrictive definition of what counts as 'structure' (Kuhn, 1978). Too much may be dismissed as content at the cost of weakening structural theory.

Studies have, however, shown that at least a probabilistic relation can hold between content and structure. Findings by Haan et al. (1968), Devine (1979) and Candee (1974) demonstrate a correlation between structural measures and political beliefs. Various studies of moral action which report relationships with Kohlberg's scheme may also be seen in this light (e.g., Krebs and Rosenwald, 1977). Suggestions, discussed above, that there may be a relationship between certain thematic elements in adolescent experience and development in cognitive structure, though currently without empirical confirmation, is germane to this issue. There does seem to be a relationship between structural development and aspects of experience and behaviour that would generally be classified as non-structural. There is also the further converse question of whether social norms affect structural development, limiting or facilitating growth at various levels.

These same issues of the importance of the personal and the influence of content on structure come up in relation to psychodynamic theory. Indeed Kohlberg (1969) classifies

psychodynamic theory as one form of the socialisation point of view. The ~~converse~~ view equating and appropriating dynamic schemes to structural ones is also represented. For instance Loevinger (1976) proposes a loose correspondence of her scheme with Erikson's (see table 5).

Generally Loevinger's view is that Erikson's work is a kind of failed structural theory, which makes the mistake of confusing specific age concerns with a genuine structural progression. The theory is insufficiently abstract and is liable to distortion by differing socialisation patterns and so is debarred from being a universally useful characterology.

Loevinger's critique says, then, that Erikson's psychodynamic progression biologises social reality and ignores the real underlying structural progression. This view deserves serious consideration. The implications of separating ego development into three conceptual realms, as proposed in this chapter, is that indeed Erikson does attempt to encompass too much in a single scheme and a clearer view might be obtained by keeping the explanatory strands conceptually separate rather than assuming an 'average expectable environment' (Hartman, 1958) which will unite them in such a way as to permit of a unitary descriptive scheme. However such a view differs from those of both Loevinger and Kohlberg in maintaining a separate and important theoretical place for an account of the individual's integration of his emotional and motivational dynamics. The Eriksonian stages are to be understood primarily in these terms, albeit that the descriptions of them are to a degree confounded by particular normative cultural patterns and, perhaps, cognitive structural progressions. In this view then

TABLE 5Theoretical Stage Correspondence
between Ego Epigenesis (Erikson)
and Ego Development (Loevinger)

I1	corresponds to	Trust/Mistrust
Δ	corresponds to	Autonomy/Shame
I3	corresponds to	Initiative/Guilt and Industry/Inferiority
I4	corresponds to	Identity/Role Diffusion
I4/5	corresponds to	Intimacy/Isolation
I5	corresponds to	Generativity/Stagnation

(from Loevinger, 1976)

Erikson's is not a failed structural theory but a flawed integrative one.

Kohlberg, too, has addressed the problem of placing Erikson's work in relation to his own. He develops this question in much greater detail to the end of producing an expanded and integrated theory, but the general analysis from which he begins is similar to Loevinger's:

'When we turn to Erikson's stages as defining focal concerns we have a stage scheme which is so multi-dimensional as to resist empirical proof in the sense which Piagetian stages may be proved. Ultimately the Eriksonian stages are 'ideal-typical' in Weber's sense'.

(Kohlberg and Gilligan,
1971, p.1076)

In contrast to this:

'... the structural model starts with relatively rigid distinctions which the functional model slides over ... The price it pays, however, is abstraction from life history.'

(Kohlberg, 1973, p.199)

The implication of this is that identity need not have an exact structural relation to logical and moral stages. But the existence of 'suggestive empirical relationships' (Kohlberg and Gilligan (1971) referring to Podd (1972)) encourages further exploration of the mutual influence of the two areas of development.

Kohlberg's original view (Kohlberg and Kramer, 1969; Kohlberg and Gilligan, 1971) was the 'stabilisation' hypothesis. Advance to principled morality sometimes occurred via a regression which involved questioning of both conventional standards and glibly enunciated principles as well as one's ascribed identity. New moral structures were not acquired in

this process, rather a realignment of ego functioning, eventuated in a revitalised commitment to the same principles.

More recently, employing the restructured scoring scheme, a single integrated account of ego and moral development is attempted (Kohlberg, 1973). The development of identity is part of moral development, and the evolution of principled reasoning is intrinsically involved with the experience of personal commitment. Widened role-taking through vicarious experience appears to be sufficient for movement through stages up to 4; but beyond that the personal experience of free choice or responsibility is intrinsic to advancing to acceptance of those moral principles to which oneself and society ought to be committed: '... it may now be said that the sophomore questioning and the young adult commitment to the social contract are part of the process of movement to stage five, rather than a process of questioning of, and commitment to morality, separable from moral stage development itself.' (Kohlberg, 1973, p.195)

Although this process of questioning and commitment - i.e. essentially the resolution of an 'identity crisis' - is intrinsic and necessary, it is not sufficient in Kohlberg's opinion for achieving principled morality. There is an additional requirement of appropriate cognitive stimulation. The earlier stabilisation view was consistent with Erikson's general formulation that for most individuals there should be a progression from an ideological to an ethical orientation (Erikson, 1964) through the resolution of the identity issue. But the structural account suggests that: 'Some but not all youths go through a recognisable phase of identity crisis and its

resolution, and that still fewer youths move from conventional to principled morality.' (Kohlberg, 1973, p.198) Kohlberg hypothesises that the resolution of an identity crisis is a necessary but not sufficient condition for movement to principled morality. Resolving the identity issue could take place without moral progression; or both ego identity and morality may remain accepted at a conventional level.

This view seems to be in accordance with Marcia's (1980) structurally oriented interpretation of Erikson's theory. He explicitly hypothesises that Piagetian logical advance is a precondition of ego identity development.

'The progression may run something like this: formal operations are necessary to identity development; a sense of identity allows one to be open to the experience of moral dilemmas in his life - a precondition for advancement in levels of moral reasoning ... To recapitulate, formal operational thought should increase the probability of both identity achievement and post-conventional moral reasoning and these two should be linked in a reciprocally enhancing way.'

(p.180)

These theoretical statements leave some questions unanswered. Is a particular stage of perspective taking (or moral reasoning) necessary for identity questioning or resolution? There seems to be an implication in these positions that an identity crisis is related not only to formal operational development but to moral or perspective taking stage 4, or possibly the 'conventional level' (i.e. stages 3 and 4), as well as perhaps to development beyond that, but this is not made entirely explicit. Are there differences between an identity resolution which eventuates in a post-conventional perspective and one which remains at the conventional level? Is commitment to an identity, rather than simply identity questioning, a

necessary condition of post-conventional status? Generally how do the factors of current structural level, cognitive stimulation, social experience, available alternatives and current expectations, and personal choice and responsibility interact developmentally across the whole domain of ego development?

The research available on the relationship of ego identity to cognitive structural development leaves most of these questions unanswered. Only one study examines the relationship of identity to Loevinger's measure of structural ego development. Hopkins (1977) reports correlations between ego development and identity status (ordered diffusion, foreclosure, moratorium, achievement), in a sample of sixty-nine college women, of .53 (total protocol rating; .60 for item sum scores). Achievement and moratorium statuses were significantly higher on ego development than the other two statuses taken together in an analysis of variance (which is, however, a statistic of dubious applicability to scores on the Loevinger test). Contingency tables are not reported so that correspondencies between ego levels and statuses cannot be compared in detail. A further problem, endemic in this area, is that it is unclear what the meaning of the identity status variable is, since the major purpose of the study was to create and validate new identity status interview topics for women and consequently two interviews on 'outer-' and 'inner-space' were given, which divide and elaborate the topics used in the commonest identity status procedure for women (Marcia and Friedman, 1970). It appears that there is likely to be a positive relationship between identity development and level of 'ego development', but in the absence of further information one

might speculate that it is not clearly ordered enough to speak of stage correspondencies or prior conditions for development. This is supportive of Loevinger's views, but it provides little further clarification.

A number of studies address the relationship of logical structure to identity, but results are inconsistent and methodological problems are common. Bersonsky et al. (1975) in a study of sixty female undergraduates found no relationship between scores on formal reasoning measures (concept attainment, and syllogism tasks) and whether subjects had experienced an identity crisis. However these measures of 'formal operations' are not Piagetian, and must be considered inferential and unreliable. Furthermore they do not classify subjects according to identity status, only by 'crisis', and it is also not reported whether the women's identity interview was used. Cauble (1976) in a study of ninety male and female undergraduates also found no relationship between identity questioning and formal operations. Again subjects were not classified according to status, it is unclear whether the women's interview was used when appropriate, and the unacceptably low interrater reliability of .61 suggests that identity was not reliably assessed.

Wagner (1976) studied the development of identity and formal operations in one hundred and twenty subjects over an age range of 10 to 18 years. Both variables showed an increase with age and a low but significant relationship to each other. She concludes that there is a relative independence between the two types of development, although formal operations may facilitate early identity questioning. However, the validity of the identity interview has never been demonstrated for the younger subjects.

Rowe (1978) reanalyses Wagner's data for the 17 year old group and points out that 72% of the high identity statuses were formal operational but only 14% of low identity subjects. In an exploratory study of twenty-six college students and non-academic staff, both male and female, Rowe (1978) found that seven of eight high status subjects were formal operational including all identity achievements. The one 'transitional formal' moratorium was in the midst of a serious emotional crisis, possibly not 'identity' questioning. However, fourteen of nineteen low status subjects were also formal in reasoning. The issue of the relationship between these aspects of development thus remains in doubt, with results from the studies which seem to measure the variables most accurately suggesting that formal operational abilities may at least facilitate identity exploration but not guarantee it.

The state of the research evidence on the relationship of identity to moral reasoning is no clearer. Cauble (1976) again found no relationship of identity to moral development, on Rest et al.'s (1974) objective test (analogous to Kohlberg's scheme). Poppen (1974) reports a general association between certain statuses and moral stages in his study of one hundred and four male and female college students: achievements tended to be ~~post~~ post-conventional; foreclosures to be conventional, with men stage 4, and women stage 3; diffusions to be stage '4½', and moratoriums to be at all moral stages. However from the abstract available, his procedure and precise results are difficult to ascertain, and he appeared to have used a modification of Kohlberg's assessment procedure.

Podd (1972) explored this relationship in one hundred

and twelve male college students, using his own adaptation of Kohlberg's early scoring procedure which classed subjects into moral levels rather than stages. He found that at the conventional level a similar proportion of subjects were in each of the identity statuses. Significantly more identity achievements than other statuses were post-conventional. Foreclosure and diffusion statuses together were at a lower level of moral development than the higher statuses, and were less likely to be post-conventional. While Kohlberg and Gilligan (1971) interpret these results as suggesting that it is necessary to question one's identity in order to question conventional morality, the presence of a few foreclosure and diffusion subjects at this level, though it may simply be attributed to instrument unreliability, warrants caution. These results do suggest at least a positive correlation between the two domains.

The pattern of results in Rowe's (1978) smaller study was somewhat different. All three of his achievement subjects were post-conventional; but so were two low status subjects, though they were predominantly at the conventional level, as were the moratorium subjects. The Podd study used a variant of the early Kohlberg scheme, and Rowe used an intermediate version; accurate assessment on the revised scheme is essential to discriminating post-conventional levels of moral judgement. The evidence so far, with this limitation, suggests that there can be a spread of statuses across the stages of moral judgement, but with identity achievements tending to predominate at the post-conventional level, to such a degree that it may still be possible to entertain Kohlberg's hypothesis that identity exploration, or possibly resolution, is necessary to attain a

post-conventional moral perspective.

Kohlberg's (1973) analysis is more ambitious than a simple comparison of identity and moral development and the proposing of specific relational conditions. He goes on to suggest a 'broader basis of integration' (p.199) between Eriksonian and structural theory which raises questions about the appropriate elements in a general theory of ego development.

Kohlberg points out that an essential difference between his own theory and Erikson's is that structural theory examines increasingly adequate cognitions of a basically unchanged world while Erikson's approach focuses upon a changing self and upon the process of choice - 'stages of perception of, and movement of the self' (p.201). We may view the stages 'either as a choice (or change) in the moral self or as change in perceived moral principles' (p.201), by concentrating either on the 'self-pole' or on the 'world-pole'. And Kohlberg suggests that a complete theory would incorporate both perspectives:

'In summary both the focus upon the self and the focus upon choice coincide with the notion of stages of an ego, of an executor or chooser who uses cognitive and other structures. In contrast, the focus of the Kohlberg moral stages is upon the form and content of 'objective' moral principles rather than upon the process of their choice, use, or application to the self. An integrated theory of social and moral stages would attempt to combine the two perspectives.'

(Kohlberg, 1973, p.201)

Recent work by Kegan (1979) which became available after the present research study was completed, presents a schematic structural outline of ego development based upon a succession of reconstructions of the self, which are created by what was formerly an experienced 'subjectivity' becoming the

'object' of the new structure of consciousness; that is, there is a kind of self-reflexive perspective-taking, parallel to that which takes place with respect to coordinating the points of view of other people. Thus this scheme sketches a series of levels of ego development in the same broad way as does Loevinger, but is based on the internal logic of the cognitive developmental theories of Kohlberg and Selman (see appendix C).

Van den Daele (1975) adds a further element to such an integrated theory of ego development by suggesting that within any level of structure an individual may tend to view matters more in terms of the self 'pole' or the 'world' pole, and that sub-stages can be distinguished on this basis (again, see appendix C). The qualitative section of the present study can be viewed as an attempt to explore further the possible outlines of such an integrated view. It does so by searching for structural progressions in the parameters of the process of choice of, and commitment to, an adequate resolution to the problem of personal identity.

However this expanded structural theory seems to have some weaknesses and contradictions which it is important to note as one searches for a more complete view. Kohlberg speaks of the importance of the role of 'personal experience of moral choice and responsibility for the welfare of others and the experience of irreversible moral choice' (p.196) in full adult development. But that role is never explicated in any theoretical way. Indeed as Sullivan (1977) points out at length an essential feature of Kohlberg's moral ideology and his consequent construction of development is the concentration on the universal as a defining feature of morality and the separation of abstract reflection

from the existential situation of concrete personal commitment to action.

Bringing the 'self' into the picture highlights structural theory's weakness in dealing with the specifics of the individual case. As Turner (1973) puts it:

'The identity (in the full sense of the personality or 'self') of the subject on the other hand exists at a relatively concrete and particular level: its essential functional property is the integration of cognitive world picture and logical operations with affect and value in the form of purposive action.'

(p.354)

As the element of the 'personal' is admitted to the theory structural criteria of logical philosophic adequacy seem to be less than comprehensive. Kohlberg (1973) speaks of this in a further distinction between the structural and the functional type of theory. The latter formulates in terms of 'psychological adequacy' - 'an increase of ego-strength, ego integration, or solidity of a sense of self-worth.' (p.201). These contributions of the 'functional' viewpoint cannot be readily excluded from a complete theory which attempts to deal with the problem of personal choice.

The need to consider the functional or dynamic aspects of ego development and to include the 'concrete' content of social values, imagery and experience thus emerges again out of Kohlberg's suggestions for an integrated structural theory, by virtue of its ambiguities and omissions. These features were described in our earlier exposition as representing analytically separable aspects of ego development to which a complete theory must pay attention. The implication of this loose form of integration for a theory of the changes in identity during the

period of adolescence and youth is that each element may be separately implicated in the onset of this process, and in the form that it takes. Thus the necessity of coming to terms with one's identity need not be only, or even mainly, the consequence of the emergence of new cognitive structural capacities, but that such capacities may still be of major importance.

The claim of both psychodynamic and socialisation theories is that the issue of personal identity will be one faced by all adolescents (at least in the context of a complex culture) by virtue of internalised age norms, the pressure of institutional demands, a changed emotional balance and, so, an altered framework of relationships, and generally increased capacities, irrespective of levels of cognitive structural development. The theoretical question then becomes not how cognitive structure makes identity an issue, but how different levels of cognitive structure affect the experience of these multi-faceted changes which are focussed on the need to create a viable sense of personal identity. Equally, perhaps, one might ask in what way the process of working through these issues of the integration of internal object relations and of rôle and value systems affect the development of cognitive, particularly social-cognitive, structures.

Ego development in this sense can be viewed as a multi-dimensional and reciprocally interactive affair, and any comprehensive theory needs to be capable of accommodating this. By the same token the most illuminating methodology for investigating these aspects of development ultimately cannot be the 'hypothetical' format commonly used by cognitive develop-

mentalists, but must seek to investigate issues grounded in the fullness and particularity of the individual's experience of vital personal concerns.

The Present Study

The present study is an investigation of some of the issues raised by this integrative examination of different approaches to ego development. It is limited to a particular developmental period, youth, here defined as 18 - 24 years. The effect of doing so is to limit some of the complexities involved, particularly the extent of the differences in life experience and the applicable social age norms, in such a way as to highlight other aspects of ego development. For a cognitive developmental research strategy this is in a sense unusual, since it must also constrain the degree of cognitive structural variation. The advantage is that structural ego development can be treated largely in the characterological manner proposed by Loevinger rather than in a developmental fashion, and its effect within a limited developmental context considered.

A further limitation is that the study concerns only young men. This is not the blind perpetuation of a sexist bias within this research area; rather it stems from a recognition that such a bias may already exist. Recent literature in ego identity (Marcia and Miller, 1980), ego development (Josselson et al, 1975) and moral development (Gilligan, 1977) calls into question the parallelism of ego development in men and women; somewhat different models may be appropriate for the different sexes. This, in addition to the potential methodological biases

in cross-sex interviewing, contributed to a decision that the best strategy would be to clarify the underlying parameters of an integrative model for one sex only.

The focus of the study is the relationship between and potential integration of cognitive developmental and psychodynamic theory in their treatment of a major developmental task, the establishment of ego identity. In the first place the interrelationship of representative measures of each perspective is examined in a correlational research design, and hypotheses concerning those relationships tested. Secondly, the ground for Kohlberg's suggestion of a more comprehensive theory is explored by applying the cognitive developmental perspective directly to the area of identity using a qualitative methodology based on interview data. These two complementary facets of the study will be described in turn.

Several measures of variables relevant to different aspects of ego development are employed in the study: Kohlberg's moral judgement interview; Loevinger's Washington University Sentence Completion test; a Piagetian measure of formal operations using the combinations and correlations tasks; a content analysis of a free response format measure of conscious concerns; the Marcia ego identity status interview. Full details of all of these appear in the next chapter. Three general categories of hypotheses may be made regarding the interrelationship of these measures, each involving several specific sub-hypotheses.

Firstly, regarding the relationship among the cognitive structural variables, on the basis of the claims for theoretical parallelism made by their creators a positive

relationship between each pair of them would be expected. It should be possible to go beyond this general prediction to specify more clearly the form of that relation. There should be a necessary but not sufficient logical relation between the Piagetian stages and their corresponding Kohlberg stages, (see table 3) and perhaps with corresponding Loevinger stages; and there should be a general correspondence between parallel Kohlberg and Loevinger stages (see table 4).

A second focus is the relationship between these structural theories and identity development. Treating the identity statuses as ordered, there should be a significant positive correlation with each of the structural measures, which is maximal when that ordering corresponds to the degree of ego strength as derived from psychodynamic theory. Further, sophisticated structural development and particularly formal operational thought has been predicted to be a precondition of high identity status, and identity questioning a precondition for principled morality.

Thirdly, structural theories are expected to be predictive of certain conscious concerns of this age group, specifically the areas of expanded future time perspective, ideological social thinking, and the tendency to be introspective. Further, the self oriented structural measures of Kohlberg and Loevinger should be more predictive of these concerns than the Piagetian logical measure. High ego identity status may also be hypothesised to be related to the presence of these concerns.

In the qualitative part of the study the analysis is taken

beyond this comparison of measures and an attempt made to examine in depth a topic which seems to be central to development during this period, choice and commitment; specifically choice of major life directions in the realms of vocation and belief in so far as that is representative of the development of ego identity.

Commitment is arguably the major defining feature of ego development at any stage. One is committed when one invests one's resources in creating meaning in any area of life. In Erikson's terms one commits one's energy to the learning of skills and so acquires a sense of industry or competence, one commits oneself to creating a close relationship with another person and so develops a capacity for intimacy. Commitment is intrinsic to the creation of the structures by which we articulate the world. Commitment in a slightly narrower sense, however, is particularly associated with the resolution of the identity issue. At this point in a person's life there is a greater range of apparent alternatives and more individual freedom than ever before, and perhaps ever again. The person is confronted with the need for personal choice and with the responsibility for that choice. The quality that is being tested and developed according to Erikson is 'fidelity', that is the capacity to choose authentically and to be true to one's subsequent commitments in life.

As a starting point for a structural approach to the process of personal commitment, we take a phenomenological analysis of this process by Hunter (1974). An act of commitment he defines as one '... in which an individual invests himself or herself knowingly and purposefully in a particular social

involvement through open and public expression of intent and engagement.' (p.1) Such acts are at the very centre of the process of individuation, he claims, for as one separates oneself from society so it becomes necessary to re-establish significant relationships with it; they are no longer merely given. This involves a balance of detachment and flexibility on the one hand and loyalty and affiliation on the other. (This is clearly similar to the dialectical analysis of Erikson made earlier in this chapter). The fundamental problem is not simply a question of commitment to what, but how to be committed. The focus is on the process.

What is common among different kinds of commitment is a personal bonding with an implied sense of permanence. The phenomenological components of this according to Hunter are that commitments: bind an individual to something or someone; are done in future perspective; involve concrete and potentially irreversible choices for that relation and against its competitors; and are undertaken with a sense of intentionality, risk, and existential involvement.

This analysis can obviously be elaborated within a phenomenological framework; this is not to the purpose here. The value of this kind of methodology has often been questioned in psychology. It was long ago written off as armchair speculation, and this criticism should be taken seriously. Is it in fact clear, for instance, that all people's experience of the process of commitment conforms to this single pattern at all times? Part of the intent of this study is in fact to examine possible differences in how people construe their systems of alternatives and their relationship to them.

What such an analysis does do is provide a basic set of issues as a starting point from which to construct an empirically based cognitive developmental analysis. Selman and Jacquette (1977a) provide an excellent description of this as an iterative process in which the investigator starts with issues derived from apparent adult 'developmental targets', then re-shapes and reworks this scheme in applying it to the world, and produces a 'cognitive-developmental map' of domains, and issues within domains. The present study represents an intermediate stage in this process. The phenomenological analysis provides an initial orienting structure for the interview method used.

The basic assumption of this research procedure is, of course, that the data can be ordered by some system. The study is exploratory in that such a system does not exist in advance. There are no rigid hypothesis in the qualitative analysis. However there are some general expectations, and those are based on assumptions which form the ground of the proposed analysis. The essential one is that an analysis can be usefully guided by the cognitive developmental structural approach. This means that there will be observable patterns of concerns and of reasoning (or 'legitimation') in the areas associated with the issues of identity development, and these will have the form of a hierarchical sequence of increasingly differentiated and integrated, qualitatively different stages. To go further, this sequence may be expected to resemble the Loevinger conception of levels of ego development (the most relevant scheme because of its generality and apparent applicability to this content domain).

Another assumption in this study is of the applicability of a wider conception of ego development incorporating

psychodynamic features. Specifically this theory proposes the existence of different forms of coping with the anxieties and ambiguities involved in committing oneself to an identity - the identity statuses. This suggests the hypothesis that these processes of identity questioning and resolution and their associated 'statuses' may have different characteristics at different levels of the structural scheme.

The format for the qualitative analysis implied by these expectations, then, is that an initial exploratory attempt be made to draw the outlines of an ideal typology of identity structures, to explicate its logic and its content and to illustrate it with examples. The method used is an intensive semi-structured interview on the subject's concerns about his evolving identity.

The criteria for this kind of research are generally underexplicated in psychology. They are essentially those of the phenomenological tradition: that patterns described be recognisable to other informed persons and that the internal logic of those patterns be consistent. Additionally here the criteria of Piagetian structure provide a further possible constraint.

An initial check on the usefulness of such a scheme can be made by relating it to the established measures of ego development. Reciprocally the interrelationships of those measures can be further explicated in a qualitative fashion by considering them in relation to the new scheme. The structural analysis is thus an exploratory effort, an initial mapping of some new ground, not a critique of existing theories nor the creation and validation of a new measure. The aim is not to

create another cognitive developmental 'test', which would add to the proliferation of such materials. Rather, the study as a whole represents an attempt to compare and examine our existing constructs of ego development during youth, and explore the outlines of a new way of integrating them. The measures employed may be regarded as landmarks helping us to orient in this domain. The purpose of the study is to elaborate our understanding of identity in the light of structural theory, and to point towards a more complete theory of the self and the process by which a person constructs him or her-self through acts of commitment.

Subjects

The subjects of the study were 49 male college students between the ages of 18 and 24. They were primarily white Canadians of middle and upper-working class parentage but there were a number of exceptions to this: three were white Americans; two were of Chinese parents, one of them an immigrant; one was a Canadian-born East Indian; one was a black West Indian immigrant; and one was a European immigrant.

Most subjects were recruited by phone contact after completing one test form (the Washington University Sentence Completion test) during tutorial periods of psychology classes. All subjects were students from Simon Fraser University, with the exception of four from Vancouver Community College, Langara. Out of 51 subjects so contacted there were 7 (13.7%) refusals to participate further or failures to attend; no subjects dropped out during the course of the study. In addition 5 subjects were recruited by personal contact with the researcher, a procedure employed to increase sampling from the more sophisticated cognitive structural levels. All subjects were paid for their participation at a rate of \$3/hour.

Test Materials

Ego Development: Ego development was tested using the Washington University Sentence Completion test (W.U.S.C., form 11-68 for men) and scored according to the Loevinger research group's

manuals (Loevinger, Wessler, and Redmore, 1970; Redmore, Wright, and Rashbaum, 1974). The test consists of 36 incomplete sentence 'stems' such as:

Raising a family ...

and Women are lucky because ...

The protocols were coded and scored blind in 'out of context' form (i.e. all responses to one stem were scored together without reference to a subject's other responses). Total protocol ratings were assigned using the automatic algorithm (Loevinger and Wessler, 1970). Ratings were made by this researcher, who was trained by following the self-teaching model (Loevinger and Wessler, 1970). A reliability check was done by an expert rater, trained at Washington University Social Science Institute, on 20% (10) of the protocols. Reliability of .87 on item sum scores, and 90% on total protocol ratings was achieved. This is considered satisfactory.

Moral Reasoning: The Kohlberg moral judgement interview form A was administered in written format. This consists of three short vignettes, each posing a moral dilemma, and each followed by a structured sequence of probe questions to be answered in a free response fashion. It was scored blind using the Standard Form Scoring Manual (Kohlberg et al., 1977) by this researcher who was trained at the Institute for Human Development, Harvard University. A reliability check was made by another rater, also trained by Kohlberg's group, on 30% (15) of the protocols. Reliability of .88 on issue scores, and .94 on total stage scores was achieved. This is considered satisfactory.

Logical Operations: A test of Inhelder and Piaget's

distinction between concrete and formal operations which could be administered in written format was developed. Neimark (1975) concludes on reviewing the methodological problems of the Inhelder tasks that 'the use of formal-operational concept tasks ... appears preferable' (p.575) for assessment purposes, to the physical task problems. On the basis of this, and their amenability to written administration, the combinations problem (Piaget and Inhelder, 1951) and the correlation problem (Inhelder and Piaget, 1958) were selected (see Appendix A). A limited pre-test showed the apparent viability of the procedure, and its comparability to performance on the chemicals task and the personal administration of the correlation problems (Inhelder and Piaget, 1958).

Scoring schemes were derived for the combination problem from Neimark (personal communication) and Byrne (1973), and for the correlation problem from Byrne (1973). Scores ranged from 1 to 4, the levels being concrete operations, transitional concrete/formal, and formal operations substages A and B. These two tasks are suggested by Byrne (1973) (who uses the similar chemicals task in place of combinations) to discriminate well between these levels if used in conjunction; rules for assigning the combined scores were derived from her procedure (see Appendix A). These definitions appear to conform to those used by Kuhn et al. (1977).

Protocols were coded and scored blind by this researcher. A reliability check by another rater on 30% (15) of the sample gave a satisfactory level of agreement (.88).

Conscious Content: A measure of conscious preoccupations was derived by putting into written form Cantril's (1965) 'human concerns' interview questions which request the respondent to list first his hopes, then his fears for the future (see Appendix B). The broad level categories in Cantril's content analysis scheme were grouped into three major categories of preoccupation: introspective, ideological, and other (see Appendix B). The protocols were coded and blind rated by this researcher. A reliability check on 30% (15) of the sample gave satisfactory (.96) agreement on the item scores. Measures of the variables introspection and ideology were derived as proportions of total number of concerns expressed.

Additionally subjects were asked to go back over their lists and to add to each item whether they felt its realisation was controlled more by themselves or by their environment, and at what age it was most likely to be realised by them. This procedure is that used by Lamm, Schmidt and Tromsdorf (1976). From it were derived variables of self-control (proportion of 'self-controlled' items) and time perspective. Three measures of the latter were used: proportion of items listed as 'anytime' or 'ongoing' concerns; average time from the subject's present age; and maximum time from the present mentioned (the index used by Lamm, Schmidt and Tromsdorf).

Ego Identity: Subjects were interviewed in the semi-structured topic format of Marcia's (1966) ego identity status interview (see Appendix D) and assessed according to the four status category system, on a clinically weighted combination of the

areas of vocation and ideology on the assessed variables, crisis and commitment. A reliability check on 40% (20) of the sample done by the scheme's originator yielded a satisfactory (85%) level of agreement.

The Extended Interview

The qualitative and exploratory part of this study depended upon an extension of this 'identity interview' methodology. The basic topics in this extended interview, since it was to be an examination of individuals' forms of resolving the issue of identity through choice and personal commitment, were those of the Marcia methodology, vocation and ideology (encompassing religion and politics). An additional area was that of relationships, which are important to identity formation and are included in the identity status interview for women (Marcia and Friedman, 1970); this is also the focus of the subsequent Eriksonian developmental issue and area for commitment, 'intimacy' (Orlofsky et al., 1973).

Within these content areas a series of sub-issues was developed from several sources: a phenomenological analysis of commitment (Hunter, 1974), previous interview research on identity and ego development (Thayer, 1963; Lucas, 1971), and some limited pilot testing. The result of the reworking of the interview material was less a series of questions than a set of topics to be explored (see Appendix D). At this stage in the research it was considered important not to constrain the content too much. The major requirement was that the material be interesting, relevant and personally meaningful to the subjects.

Various examples showing typical interview sequences and the general flavour of the sessions are to be found in Chapter 4.

Also included in the interview topics was the subjects' experiences of college, based upon Perry's (1970) research. These questions are also in Appendix D and an outline of Perry's scheme is in Appendix C. At an early stage of the research it was thought to be of interest to obtain ratings on Perry's outline of 'epistemological structures'. It appeared that it would be difficult to get interrator reliability on these, however, so the decision was made to simply include this material with the rest of the extended interview, primarily as an expansion of the 'ideological' topics..

To the degree that this is an exploratory study the interview is a methodology in process of formation and refinement. In fact it underwent alteration during the study. The planned procedure for the research was to study half the subjects in depth using the extended interview as an addition to the standard Marcia identity status procedure (generally requiring a further session). It was found useful and interesting, however, as the study proceeded to elaborate to some degree on the basic 'status' interview for all subjects. The split interview procedure was adopted with 15 subjects. All other subjects were interviewed according to an integrated procedure which included the usual format of the identity status interview but added more extensive than usual probing along the lines of the full interview (see, also, Appendix D). This made the interviewing less cumbersome and repetitive, and more flexible and appropriate; in effect it became a more useful tool as exploration made the area more familiar. This procedure permitted all

subjects to be classified according to the emergent 'identity structure' typology (see chapter 4). The identity status raters were in agreement that the validity of the status interview was not impaired by the exploration of the issues in greater depth.

Procedure

The study was introduced to potential subjects in small tutorial groups which were part of college psychology courses of various levels. It was described as a study 'of how people make decisions about important areas in their life and how they choose major directions during early adulthood'. They were informed that the study was in two parts, the first one here involving a questionnaire, and the second part an interview and further tests for which they would receive payment. They would be contacted personally and their participation in this second part requested; they were under no obligation to continue.

The W.U.S.C. was given to them and introduced as a test of 'the ways you think about the social world'. They were asked to 'complete the sentences as fully as you feel necessary to express your views'. Name, age, and contact information were obtained on this form. One hour was available to complete the test.

Phone contact was made with subjects of appropriate age and sex. (No other selection criteria were used, contrary to the original intent, which was to attempt to ensure a range of high and low scorers on the sentence completion test; this was because of the scarcity of male subjects in the relevant

age group from these contact sources.) Subjects were reminded of the previous contact and asked if they wished to participate further. The study was described again as involving 'how they had gone about making decisions about major directions in their life'. It was suggested that the researcher 'wished them to collaborate together in an effort to explore how that process had taken place for them'. They were reminded of the payment rate of \$3/hour and an appointment made where appropriate.

Five subjects were not contacted in this manner but approached privately for their participation. They were acquaintances of the researcher who were felt to be particularly interesting to include in the study. They were given the W.U.S.C. to complete at their first appointment and their subsequent participation was identical with that of other subjects.

The rest of the study was undertaken in a private office. The purpose of the study was reintroduced and the Marcia identity status interview and the extended interview on the process of commitment were conducted and tape recorded. The length of these interviews varied considerably depending upon the subject's expressiveness and the extent of the exploration attempted. The minimum length was one hour and the maximum four hours. Similarly the number of sessions required varied; generally it was one, or two, occasionally three.

Subsequently the other written tests were administered, always in the same order: Kohlberg's moral judgement interview, the conscious concerns list, and the test of formal operations. Occasionally subjects were requested to complete the Kohlberg test or the conscious concerns test between appointments. The

researcher was always present during completion of the formal operations test to make occasional clarifying comments when necessary.

Subjects were paid and their questions about the whole study answered in a discussion for those interested. They were encouraged to return at a time when results would be available.

Protocols were coded by an assistant so as to permit blind rating.

Analysis

The structural ratings and the identity statuses were treated as ordinal variables (statuses ordered as foreclosure, diffusion, moratorium and achievement) and related to each other using non-parametric correlations (Kendal's tau), contingency statistics and the Kruskal-Wallis analysis of variance for ranks. Of the measures of content, the indices consisting of proportions were left untransformed; a logarithmic transformation was used on maximum temporal perspective ($\log \tau$ (max)) and on average temporal perspective ($\sum(\log \tau x)/n$) to homogenise variance. These measures were the independent variables in one-way analyses of variance against the ordinal variables. A principle factor analysis with varimax rotation was performed on the entire correlation matrix. Ideal typological and case study qualitative methods were the final form of analysis.

The results of the statistical analysis are presented in terms of the three broad classes of hypothesis made in the 'Introduction': the interrelations among structural variables; the relationships of those to identity; and the relationship of structure and identity to the content variables. The form of the data in the contingency tables relevant to the first two of these classes of hypotheses (tables 6 to 11) do not meet the guidelines for the applicability of the Pearson χ^2 statistic (Siegel, 1956) having low expected probabilities in many cells. Hays (1963) advises against grouping data post-hoc but suggests that the likelihood ratio ' χ^2 ' may be somewhat superior in these circumstances. This statistic is the one quoted for the full contingency tables. It must still be regarded as potentially unreliable, but is not crucial to testing specific hypotheses and is presented for inspection. Specific hypotheses are tested regarding particular relationships in the contingency table using 2 x 2 arrays, and here the Pearson χ^2 corrected for continuity (Siegel, 1956) is employed. All the correlation coefficients reported are Kendall tau's (r_τ). The raw data matrix is presented in appendix E.

Age

Age is found to show a moderate and significant correlation with most of the developmental variables: with identity, $r_\tau = .47$, $p < .001$; with logical operations, $r_\tau = .29$, $p < .01$; with moral reasoning, $r_\tau = .32$, $p < .005$; but with

Loevinger's ego development, however, $r_T = .01$, n.s.

This seems to indicate that these variables do indeed undergo development over this age range, (18 - 24 years), with the apparent exception of ego development. It appears to show, further, that possibly development in identity may be more substantial than purely structural development during this period, though the significance of this difference cannot be tested.

There are some artefacts in the selection of subjects which may bias these results, and must be borne in mind in interpreting them. The five subjects selected personally by the researcher as probably developmentally advanced, as opposed to being selected from college classes, were all 21 years and over. Generally, older subjects were those still in university beyond 21 years, a factor possibly related in some way to identity. Older subjects were often selected from upper levels psychology classes, which contain a population selected for those interested in social sciences and education. Thus the sample is in no sense random and representative of even the college population. Hence developmental inferences from these cross-sectional data can only be made with caution.

Structural variables

The relationship between logical operations and moral reasoning is shown in table 6. This is overall significant: $\chi^2 = 40.9$, d.f. = 21, $p < .01$. It represents a moderate correlation, $r_T = .50$, $p < .0001$. This confirms the existence of the general hypothesised relationship.

It is important to examine the contingency table more closely to make a precise structural analysis. It appears that these results are consistent with the hypothesis that emergent formal operations, (2-3 transitional scores), are a necessary but not sufficient condition for the emergence of principled reasoning (stages 4(5), including $4\frac{1}{2}$, and 5(4)). Testing this hypothesis in the reduced 2 x 2 contingency table of formal operations and post-conventional reasoning gives: $\chi^2 = 2.58$, d.f. = 1, $p = .1$. Thus the number of subjects involved are not sufficient to support this hypothesis at a satisfactory level of significance. A further hypothesis which was suggested by the data of Kuhn et al. (1977), but which they were hesitant to believe, is confirmed by these results: that emergent formal operations are necessary for consolidated stage 4 thought but there is only one such case; in fact in these data they are necessary for '4' to be a major stage (i.e. to reach stage 4(3)).

It also appears from these data that the 'not sufficient' condition could be called into question at the highest logical levels in that all subjects who reason at full formal operations, (stage 3B), are also at least major stage 4 morally. This indicates a closer relation between logical sophistication and social development than is usually suggested.

The relationship between logical operations and Loevinger's ego development is shown in Table 7. The overall $\chi^2 = 19.47$, d.f. = 12, is not significant, though it shows a trend, $p < .1$, as does the correlation $r_T = .23$, $p < .1$. This hypothesis is not confirmed.

Looking at the table structurally, it appears as if

LOGICAL OPERATIONS X MORAL REASONING

Logical Operations:	Stages	Moral Reasoning:							
		2(3)	3(2)	3	3(4)	4(3)	4	4(5)	5(4)
	2	0	3	6	3	0	0	0	0
	2-3	0	1	1	5	2	0	1	1
	3a	1	2	1	5	4	0	2	1
	3b	0	0	0	0	4	1	3	2

$\chi^2 = 40.86$

d.f. 21

$p < .01$

$r_T = .50$

$p < .0001$

	Conventional	Post-Conventional
Concrete	12	0
Formal	27	10

$\chi^2 = 2.58$

d.f. 1

$p = .1$

LOGICAL OPERATIONS x 'EGO DEVELOPMENT' (W.U.S.C.)

Logical Operations:	Stages	Ego Development:				
		D-3	I3-4	I4	I4-5	I5
	2	0	7	5	0	0
	2-3	0	3	6	1	1
	3a	0	1	9	5	1
	3b	1	2	6	1	0

$\chi^2 = 19.47$

d.f. 12

$p < .1$

$r_T = .23$

$p < .1$

	I3/4 + I4	I4/5 + I5
Concrete	12	0
Formal	28	9

$\chi^2 = 2.13$

d.f. 1

$p = .15$

EGO DEVELOPMENT (W.U.S.C.) x MORAL REASONING

Ego Development:	Stages	Moral Reasoning:							
		2(3)	3(2)	3	3(4)	4(3)	4	4(5)	5(4)
	D-3	0	0	0	0	1	0	0	0
	I3-4	1	2	5	3	1	0	1	0
	I4	0	4	2	9	5	1	3	2
	I4-5	0	0	1	1	3	0	2	0
	I5	0	0	0	0	0	0	0	2

$$\chi^2 = 31.64$$

$$r_t = .36$$

d.f. 28

p < .01

n.s.

emergent formal operations may be a necessary, but not sufficient condition for I 4/5 and I5. With data grouped to test this specific hypothesis $\chi^2 = 2.13$, d.f. = 1, $p \approx .15$; a satisfactory significance level is not achieved.

The relation between moral reasoning and Loevinger's ego development is shown in table 8. Overall $\chi^2 = 31.64$, d.f. = 28, n.s.; and there is low correlation of $r_T = .36$, $p < .01$. The presence of a general linear relationship between the variables is confirmed, but it is not a strong one.

Examining the contingency table, the general scatter of scores, (indicated in the size of the correlation), does not allow much to be said about clear ordered relationships within it. It does seem to suggest that Kohlberg's claim that I4 is equivalent to moral stage 4 is more accurate than Loevinger's that it corresponds to stage 5: 77% of subjects at I3/4 are at stages 3(2), 3, and 3(4); 58% of subjects at I4 are at stages 3(4), 4(3) and 4; while only 19% of subjects at I4 are at stages 4(5) and 5(4). It is apparent how indiscriminating the I4 category is with respect to moral development. The hypothesised existence of clear correspondences between moral and ego stages within this range is not confirmed.

Examining the three structural variables as a group, it is of interest to partial out from each pair the effect of the other one, and the effect of other major variables. Controlling for the third structural variable one finds: for logical operations and moral reasoning controlling for ego development $r_T = .46$, $p < .001$; for logical operations and ego development controlling for moral

reasoning $r_T = .06$, n.s.; and for moral reasoning and ego development, controlling for logical operations $r_T = .29$, $p < .05$. The largest reduction in the size of the correlation is in removing the influence of moral development from the relation of logic to the Loevinger test; the borderline significant correlation between these variables almost entirely disappears. The other relations are lowered to a lesser extent. In contrast, when the influence of identity status (which is addressed in detail in the next section) is controlled for the various correlations remain almost unchanged; logical operations with ego development $r_T = .23$, $p < .1$; moral reasoning with ego development $r_T = .36$, $p < .005$; logical operations with moral reasoning $r_T = .50$, $p < .001$. When the effect of age is partialled out of each of the structural interrelationships one finds: for logical operations and moral reasoning, $r_T = .45$, $p < .001$; for logical operations and ego development, $r_T = .23$, $p < .1$; and for moral reasoning and ego development, $r_T = .38$, $p < .01$. Again, these effects are small or non-existent.

In summary then, the first general hypothesis that the structural variables are positively and coherently related to each other is generally borne out. The three variables form a group with moderate to low positive correlations between them, which obtain independent of relationships with age or identity status. There is a clear and orderly structural relationship between logical operations and moral reasoning, the development of formal logic proceeding that of post-conventional morality and constituting a necessary, but not sufficient condition for it. Emergent formal operations in these data appear to be a

necessary condition for the predominance and consolidation of stage 4 judgement, rather than for the emergence of stage 5. Also in these data, full formal operations appears as a sufficient condition for major stage 4 morality. The Loevinger 'ego development' variable seems to stand apart from the other two, with a lower level of relationship and a less orderly structural pattern. This might be expected on the basis of its more distant theoretical connection with them. This relationship seems to be accounted for by elements in the moral reasoning test only. It is perhaps a more purely 'social' variable, (again, however, emergent formal operations may possibly be a necessary, but not sufficient condition for the levels beyond I4). In fact the test produces a rather poor spread of scores in this population (80% of subjects are in I3/4 or I4), which reduces its value as a characterological variable.

Identity

The identity statuses were ordered foreclosure (F), diffusion (D), moratorium (M), achievement (A), for the purposes of correlational analysis; this will receive comment below. Further analysis used the Kruskal-Wallis one way analysis of variance for ranks (Siegel, 1956).

The relationship of ego identity to moral reasoning is shown in table 9. The Kruskal-Wallis analysis shows: $H = 5.55$, d.f. = 3, n.s.; also $\chi^2 = 5.82$, d.f. = 21, n.s. There is a low correlation of $r_T = .27$, $p < .05$. With age partialled out this is reduced to $r_T = .14$, n.s. It appears from this that the identity statuses are not well discriminated by the distribution

of moral reasoning scores, and that there is not a very strong linear relationship between identity development and moral reasoning, none that could not be accounted for by their both undergoing some age related development during this period of life.

However, a structural examination of the contingency table indicates that the higher identity statuses appear to be necessary conditions for the use of principled, (stage 5), moral reasoning, as predicted. The 2 x 2 contingency table of post-conventional morality and high identity status shows $\chi^2 = 8.08$, d.f. = 1, $p < .01$, confirming the support for this hypothesis. (In fact the relationship holds for attaining consolidated stage 4 thought, but being based on a single case and having no obvious theoretical rationale, this must be considered very doubtful.) Further it appears that full identity achievement may possibly be a necessary condition for the attainment of principled reasoning as the major mode of thought. Again the 2 x 2 contingency table of major stage principled thought and identity achievement shows a $\chi^2 = 5.64$, d.f. = 1; $p < .01$; but this result is a post-hoc finding and cannot be regarded as statistically significant on this basis. That identity development is not a sufficient condition is shown by the spread of high identity statuses over almost the full range of moral stages. So it seems that while identity status and moral reasoning are not simply linked in a linear fashion, questioning and achieving one's identity does provide a necessary basis for development to a principled moral level. On the other hand, the capacity for a high level of moral thought is not necessary to the process of forming an identity.

IDENTITY STATUS x MORAL REASONING

Identity Status:	Stages	Moral Reasoning:							
		2(3)	3(2)	3	3(4)	4(3)	4	4(5)	5(4)
	Foreclosure	0	2	3	5	3	0	0	0
	Diffusion	1	1	1	3	3	0	0	0
	Moratorium	0	2	1	3	1	0	5	0
	Achievement	0	1	3	2	3	1	1	4

$\chi^2 = 15.82$ d.f. 21 n.s.

$r_T = .27$ $p < .05$

Kruskal-Wallis $H = 5.55$ d.f. = 3 n.s.

Order of Medians: F - D - M - A

	Conventional	Post-Conventional
Low Status	22	0
High Status	17	10

$\chi^2 = 8.08$ d.f. 1 $p < .01$

IDENTITY STATUS x LOGICAL OPERATIONS

Identity Status:	Stages	Logical Operations			
		2	2-3	3a	3b
	Foreclosure	4	3	5	1
	Diffusion	2	2	5	0
	Moratorium	3	3	2	4
	Achievement	3	3	4	5

$\chi^2 = 9.94$ d.f. 9 n.s.

$r_T = .16$ n.s.

Kruskal-Wallis $H = .26$ d.f. 3 n.s.

Order of Medians: F - D - M - A

IDENTITY STATUS x EGO DEVELOPMENT (W.U.S.C.)

Identity Status:	Stages	Ego Development				
		D-3	I3-4	I4	I4-5	I5
	Foreclosure	0	2	7	4	0
	Diffusion	0	4	5	0	0
	Moratorium	0	4	6	2	0
	Achievement	1	3	8	1	2

$\chi^2 = 11.67$ d.f. 12 n.s.

$r_T = -.06$ n.s.

Kruskal-Wallis H = 2.80, d.f. 3 n.s.

Order of Medians: D - M - A - F

The relationship of ego identity to logical operations is shown in table 10. The overall relation is not significant: $\chi^2 = 8.1$, d.f. = 9; and Kruskal-Wallis $H = .26$ d.f. = 3; nor is the correlation between them: $r_T = .16$, (reduced to .03 with age partialled out). There appears to be no statistical relationship between advance in logical sophistication and the attainment of identity, disconfirming this hypothesis.

A structural examination of the table provides little additional information and tends to confirm the lack of relationship. Inspection shows that, contrary to prediction, formal operations is not a necessary condition for identity achievement or identity crisis. However, it does appear that the attainment of full formal thought (stage 3B), may substantially increase a person's chances of questioning and attaining his identity. The one disconfirming case suggests however, that this is not a certainty.

The relationship between ego identity and Loevinger's ego development is shown in table 11; the overall relation is not significant: $\chi^2 = 13.40$ d.f. = 12; Kruskal-Wallis $H = 2.80$ d.f. = 3; nor is the correlation $r_T = -.06$, (-.07 with age partialled out). There appears to be no relationship between identity status and ego development contrary to prediction.

A structural examination confirms this lack of correspondence with one exception, the possibility that identity achievement is a necessary, but not sufficient condition for reaching the 'autonomous' level, (I5), but the numbers (2) are so limited as to prevent drawing such a conclusion and the χ^2 on the relevant 2 x 2 contingency table is not significant

($\chi^2 = 1.93$ d.f. = 1). (It may be noted that the sole low scorer (D-3) on the W.U.S.C. was also an identity achievement; inspection of this subject's protocol suggests that this score is a gross underestimate, the result of his completing the sentence completion test with inadequate care.)

The correlations given are based on treating identity status as an ordinal variable when it is strictly nominal. It can certainly be argued that this is appropriate since the variable is developmental, some stages being more 'advanced' than others, and also representative of one conception of 'ego strength', some statuses being more 'integrated' than others. The particular ordering can be contended, however. That used (F - D - M - A) was hypothesised to be the most 'developmentally accurate' and so most likely to relate linearly to the structural variables.

This hypothesis can be checked by examining the ordering of the median ranks for the statuses on each variable (see tables 9, 10, and 11). This bears out the hypothesised order as the one which produces the most substantial correlation with logical operations and moral reasoning. However this is in the context of the finding of a lack of significant differences on the Kruskal-Wallis analyses of variance. With the ego development variable the order is not as hypothesised, nor is it the theoretically predicted alternative (D - F - M - A), but is diffusion-moratorium-achievement-foreclosure. This might suggest the interpretation that 'definedness' of views and opinions is the component of identity which has the strongest influence on the W.U.S.C. This order raises the correlation to $r_T = .23$,

'p' < .05. However, again this is in the context of the lack of a significant Kruskal-Wallis H, and this maximum correlation is post-hoc and the significance level must be adjusted accordingly with regard to all the possible orderings (Myers, 1972) and it does not reach a satisfactory level. Further, the correlation of identity status with age is maximised by the order foreclosure-moratorium-diffusion-achievement, which might suggest that developmentally the most common alternative end points for the identity formation process tend to be achievement or diffusion, but again this post-hoc finding cannot be accepted as statistically significant for similar reasons.

In summary, identity status is not linearly related to any of the structural variables to a degree that might not be accounted for by them undergoing parallel age related development. This confirms the second general hypothesis that the development of ego identity is a separable and distinct line of development from cognitive structural change. Nonetheless these elements of development do appear to be interrelated and certain logical-structural conditions appear to apply. Questioning ones identity seems to be a necessary but not sufficient condition for using post-conventional moral reasoning, (and achieving an identity may be necessary for, or at least facilitate, having principled thought as a major stage). Similarly, there is at least a possibility that identity achievement is necessary for attaining the 'autonomous' level of ego development. On the other hand, structural development seems to be in no way necessary for the development of higher identity statuses, though there is a suggestion that full formal thought does facilitate identity

questioning.

Looking at the interrelations of all the major developmental variables as a whole, a coherent pattern emerges. Identity questioning and resolution can take place at any of the levels of structural development looked at, though it is made more likely by the highest level of logical thought. Emergent formal operations is a necessary condition for post conventional moral reasoning and possibly for major usage of stage 4 moral thought, but to develop beyond stage 4 to a post-conventional perspective, it is also necessary to go through a process of questioning ones identity. (This suggests the possibility that the identity resolution process at conventional and post-conventional stages have different meanings and different characteristics. This is examined in detail in the next chapter.) Ego development as defined by Loevinger, has a low and general, rather than structurally coherent relation to the social, (i.e. moral), aspects of the Piagetian theories of development. Emergent formal operations may possibly be necessary for I4/5 and I5. It may be that identity resolution is necessary to reach the autonomous stage, but the Loevinger variable does not seem to provide much clear or additionally useful information to understanding the relationship of identity and cognitive structure.

Content Variables

The relationship of each of the four major developmental variables above, plus age, with each of six aspects of the 'content of conscious concerns' - proportion of introspective

content; proportion of ideological content; degree of control of outcome by self rather than by environment; degree of current and ongoing temporal perspective; maximum temporal perspective; and average temporal perspective - was examined using a series of one-way analyses of variance. Correlations (τ s) were also computed; and a post-hoc pairwise comparison of means carried out using the Scheffe and L.S.D., tests. (Only the Scheffe results are discussed, with $p < .1$ accepted as an adequate significance level; L.S.D. tests are regarded as too lax in this case, though the results are listed). Results are reported in tables 12 - 16. There follows a summary of the positive findings.

Identity statuses differ significantly on introspection, ($p < .05$), with means ordered F - D - A - M. Post-hoc comparisons shows the F-M comparison significant. The overall correlation, (identity ordered as usual F - D - M - A), is $r_{\tau} = .25$, $p < .01$. Thus there is a clear tendency for introspective contents to increase with higher identity status as predicted. (The trend for moratoriums to be more introspective than achievements, though interpretable, is not significant post hoc). It should be noted that the correlation is reduced below significance, ($r_{\tau} = .10$), when age is partialled out, but this could be interpreted as an effect of the reduced range of identity variance produced by this covariance procedure.

No other content variable produced significant F's with identity status. There is one significant correlation, ($r_{\tau} = .22$, $p < .05$), of identity with self-control, possibly suggesting a tendency for higher identity statuses to feel that

their future is more under their influence. However, this finding cannot be confidently regarded as statistically significant in the context of multiple hypotheses (six for each developmental variable). Moreover it is reduced to a non-significant trend, ($r_T = .18$, $p < .1$), when age is partialled out.

Moral development is also related to introspection and self-control. With introspection, overall F is significant, ($p < .05$), and correlation is $r_T = .39$, $p < .001$ (.31, $p < .01$ with age partialled out). ~~Post-hoc~~ tests on the means, (which are ordered stages 3(2), 3, 3(4), 4(3), 5(4), 4, 4(5)), shows a significant difference between 3(2) and 4(5). The relation of moral development to self-control shows a non-significant trend, on the anova, ($p < .1$), and the correlation, ($r_T = .14$, $p < .1$; reduced to non-significant $r_T = .10$ with age partialled out).

Logical operations shows little relationship to any of the content variables, although there is a low correlation with introspection: $r_T = .23$, $p < .05$ (.14, n.s. with age partialled out). Again the statistical significance of this is dubious, as is a non-significant trend with ideological concern: $r_T = -.15$, $p < .1$ (-.09, n.s. with age partialled out).

Ego development shows similar relationships with introspection: $r_T = .21$, $p < .05$; and ideology: $r_T = -.15$, $p < .1$; both are unaffected by controlling for age. Ego development shows some relationship to temporal perspective: F test is significant, ($p < .05$), with ongoing concerns, and there is trend ($p < .1$), with maximum perspective. Interestingly, although the post-hoc contrasts are not significant, the order of the means on these two time variables is reversed, (being I3/4, I4, I4/5, I5 on the former). That is, higher levels of ego development involved a

TABLE 12

ANOVA - Identity, Status x Content Variables

(* = significant at, at least, 0.05 level)

i) Introspection

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.497	0.166	3.072	0.037*
Within Groups	45	2.425	0.054		
Total	48	2.922			

Pairwise Comparison of Means:

Scheffe (p < .1) : For/Mor

L.S.D. (p < .05) : For/Mor + Ach

ii) Ideology

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.086	0.029	1.269	0.297
Within Groups	45	1.019	0.023		
Total	48	1.105			

Pairwise Comparison of Means:

None significant

iii) Self-Control

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.409	0.136	2.04	0.121
Within Groups	45	3.003	0.067		
Total	48	3.412			

Pairwise Comparison of Means:

None significant

TABLE 12 (continued)

iv) Ongoing Concerns

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.340	0.113	1.380	0.283
Within Groups	45	3.898	0.086		
Total	48	4.238			

Pairwise Comparison of Means:

None significant

v) Maximum Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.805	0.269	0.797	0.502
Within Groups	45	15.165	0.338		
Total	48	15.971			

Pairwise Comparison of Means:

None significant

vi) Average Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.054	0.018	0.150	0.929
Within Groups	45	5.369	0.119		
Total	48	5.422			

Pairwise Comparison of Means:

None significant

ANOVA - Moral Reasoning x Content Variables

i) Introspection

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	7	0.886	0.127	2.549	0.028*
Within Groups	41	2.036	0.050		
Total	48	2.922			

Pairwise Comparison of Means:

Scheffe ($p < .1$) : st-3/st-4(5)L.S.D. ($p < .05$) : st-3/st-4(5)

ii) Ideology

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	7	0.125	0.018	0.749	0.632
Within Groups	41	0.980	0.024		
Total	48	1.105			

Pairwise Comparison of Means:

None significant

iii) Self-Control

Source	d.f.	S.S.	M.S.	F. Ratio	Prob
Between Groups	7	0.886	0.127	2.055	0.071
Within Groups	41	2.526	0.062		
Total	48	3.412			

Pairwise Comparison of Means:

L.S.D. ($p < .05$) : st-4(3)/st-4 + st-4(5) + st-5(4)

TABLE 13 (continued)

iv) Ongoing Concerns

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	7	0.828	0.118	1.422	0.223
Within Groups	41	3.410	0.083		
Total	48	4.238			

Pairwise Comparison of Means:

L.S.D. ($p < .05$) : $st-3 + st-4(5)/st-4(3)$

v) Maximum Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	7	1.260	0.180	0.502	0.828
Within Groups	41	14.711	0.359		
Total	48	15.971			

Pairwise Comparison of Means:

None significant

vi) Average Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	7	0.622	0.089	0.758	0.625
Within Groups	41	4.801	0.117		
Total	48	5.422			

Pairwise Comparison of Means:

None significant

ANOVA - Logical Operations x Content Variables

i) Introspection

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.226	0.075	1.256	0.301
Within Groups	45	2.696	0.060		
Total	48	2.922			

Pairwise Comparison of Means:

None significant

ii) Ideology

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.078	0.026	1.132	0.346
Within Groups	45	1.028	0.023		
Total	48	1.105			

Pairwise Comparison of Means:

None significant

iii) Self-Control

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.256	0.085	1.214	0.315
Within Groups	45	3.156	0.070		
Total	48	3.412			

Pairwise Comparison of Means:

None significant

TABLE 14 (continued)

iv) Ongoing Concerns

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.190	0.063	0.705	0.554
Within Groups	45	4.048	0.090		
Total	48	4.238			

Pairwise Comparison of Means:

None significant

v) Maximum Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.538	0.179	0.523	0.669
Within Groups	45	15.432	0.343		
Total	48	15.971			

Pairwise Comparison of Means:

None significant

vi) Average Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	3	0.913	0.044	0.373	0.773
Within Groups	45	5.291	0.118		
Total	48	5.422			

Pairwise Comparison of Means:

None significant

TABLE 15

ANOVA - Ego Development (W.U.S.C.) x Content Variables

i) Introspection

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	0.345	0.086	1.474	0.226
Within Groups	44	2.577	0.059		
Total	48	2.922			

Pairwise Comparison of Means:

L.S.D. (p < .05) : 13-4/15

ii) Ideology

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	0.042	0.010	0.429	0.787
Within Groups	44	1.064	0.024		
Total	48	1.105			

Pairwise Comparison of Means:

None significant

iii) Self-Control

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	0.259	0.065	0.903	0.471
Within Groups	44	3.153	0.072		
Total	48	3.412			

Pairwise Comparison of Means:

None significant

TABLE 15 (continued).

iv) Ongoing Concerns

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	0.885	0.221	2.903	0.032*
Within Groups	44	3.353	0.076		
Total	48	4.238			

Pairwise Comparison of Means:

L.S.D. (p < .05) : I3 + I3/4 + I4/D-3

v) Maximum Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	2.704	0.676	2.242	0.080
Within Groups	44	13.267	0.302		
Total	48	15.971			

Pairwise Comparison of Means:

L.S.D. (p < .05) : I3 + I3/4/D-3

vi) Average Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	4	0.759	0.190	1.790	0.148
Within Groups	44	4.663	0.106		
Total	48	5.422			

Pairwise Comparison of Means:

L.S.D. (p < .05) : I3 + I3/4/D-3

TABLE 16

ANOVA - Age x Content Variables

i) Introspection

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	0.922	0.154	3.227	0.011*
Within Groups	42	2.000	0.048		
Total	48	2.922			

Pairwise Comparison of Means:

Scheffe ($p < .1$) : 18 yrs + 19 yrs/23 yrsL.S.D. ($p < .05$) : 18 yrs + 19 yrs/22 yrs/23 yrs

ii) Ideology

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	0.122	0.020	0.871	0.524
Within Groups	42	0.983	0.023		
Total	48	1.105			

Pairwise Comparison of Means:

None significant

iii) Self-Control

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	0.520	0.087	1.258	0.298
Within Groups	42	2.892	0.069		
Total	48	3.412			

Pairwise Comparison of Means:

None significant

TABLE 16 (continued)

iv) Ongoing Concerns

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	0.710	0.117	1.384	0.244
Within Groups	42	3.539	0.084		
Total	48	4.238			

Pairwise Comparison of Means:

L.S.D. ($p < .05$) : 20 yrs/22 yrs + 23 yrs

v) Maximum Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	1.268	0.211	0.604	0.726
Within Groups	42	14.703	0.350		
Total	48	15.971			

Pairwise Comparison of Means:

None significant

vi) Average Time Perspective

Source	d.f.	S.S.	M.S.	F. ratio	Prob
Between Groups	6	0.338	0.056	0.466	0.830
Within Groups	42	5.084	0.121		
Total	48	5.422			

Pairwise Comparison of Means:

None significant

higher proportion of concerns that exist now and will continue to be important in the future, but there is a trend that suggests less concern with naming very distant goals at the end of life.

Age is significantly related to introspection on the anova ($p < .01$) and has a moderate correlation with it, ($r_T = 0.36$, $p < .001$). This includes a significant post-hoc comparison between eighteen and nineteen year olds and twenty-three year olds. There are also small correlations of dubious significance with ideology, ($r_T = -.22$, $p < .05$), and ongoing concerns, ($r_T = .18$, $p < .05$), and a trend to relation with self-control, ($r_T = .14$, $p < .1$).

The six content variables themselves are interrelated in ways that should be remembered in interpreting the pattern of correlations with other variables. Some of these correlations are empirical, but some are, at least in part, artefactual, since the measures are constructed so as to be not entirely independent of each other. Thus introspection and ideology are non-independent and correlate here, ($r_T = -.24$, $p < .01$). Similarly, average time perspective is not independent of maximum time perspective, ($r_T = .41$, $p < .001$), nor of ongoing concerns, ($r_T = -.40$, $p < .001$). Non-artefactual, empirical relationships do obtain between other variable pairs. Introspection is correlated with ongoing concerns, ($r_T = .21$, $p < .05$), and with self-control, ($r_T = .21$, $p < .05$); ideology is also negatively correlated with self-control, ($r_T = -.25$, $p < .01$).

In summary, there is a general effect of age, during this period of 'youth', on some of these 'content' variables, though the sizes of the relationships are small. People become

more introspective and possibly slightly less ideological, (the former as predicted, the latter counter to prediction, but possibly artefactual), and possibly more concerned with present and ongoing values. The effects of identity exploration again are apparent primarily in increased introspection and possibly also some greater sense of self-control, although these changes may possibly be subsumed by the general age effects. Age must presumably be considered in the 'socialisation' category of ego developmental variables.

In terms of structural advance, simple logical development has no effect independent of age, but the social cognitive variables do. This is in accord with the prediction of Blasi and Hoeffel (1974). Of the three main content categories they refer to, only introspection is clearly related to moral development. Loevinger's ego development may bear a low relationship to introspection but may also be related to the tendency to increasingly consider ongoing values rather than distant goals. This aspect of time perspective development is not mentioned in the literature.

Factor Analysis

The entire correlation matrix of twelve variables was subjected to a principal component factor analysis with a varimax rotation. The results are shown in table 17.

It will be noted that a new variable 'identity structure' is included in this matrix. This is a hierarchical ego developmental variable developed on and coded from the extended identity interview. It is extensively discussed in the next

TABLE 17

FACTOR ANALYSIS MATRIXA Principal Factor Matrix

Variables	Factors				
	I	II	III	IV	V
Identity Structure	0.74	0.05	0.20	0.07	-0.14
Identity Status	0.53	0.02	0.29	-0.55	-0.04
Ego Development	0.31	-0.02	-0.15	0.37	-0.17
Logical Operations	0.50	0.08	-0.07	0.15	-0.06
Moral Reasoning	0.74	0.16	-0.01	0.27	-0.20
Age	0.58	0.07	0.03	-0.26	0.29
Introspection	0.60	-0.02	0.08	0.01	0.04
Ideology	-0.28	0.22	-0.80	0.09	-0.22
Self-Control	0.26	0.07	-0.21	-0.23	-0.03
Ongoing Concerns	0.29	-0.38	0.28	0.27	0.41
Maximum Time	-0.01	0.58	0.11	0.19	0.45
Average Time	-0.10	0.78	-0.17	-0.04	-0.04

B Rotated Factor Matrix

Variables	Factors				
	I	II	III	IV	V
Identity Structure	0.64*	0.10	0.43*	0.12	-0.02
Identity Status	0.10	0.09	0.80*	-0.01	-0.12
Ego Development	0.50*	-0.09	-0.15	0.03	-0.05
Logical Operations	0.49*	-0.10	0.17	0.03	0.05
Moral Reasoning	0.79*	-0.02	0.23	0.01	0.06
Age	0.20*	-0.21*	0.59*	0.18	0.18
Introspection	0.44*	-0.21*	0.33*	0.12	0.01
Ideology	-0.12	0.89*	-0.02	-0.02	0.09
Self-Control	0.11	-0.25*	-0.27*	-0.16	-0.02
Ongoing Concerns	0.15	0.02	0.07	0.72*	0.04
Maximum Time	0.01	0.08	-0.01	0.02	0.76*
Average Time	0.04	0.01	-0.01	-0.59*	0.55*

(* = Loadings > 0.20)

chapter and its relations to the other variables examined. It is included here in this overall analysis because it is regarded as an integral part of the study.

This analysis must be viewed with caution. The ratio of subjects (49) to variables (12) is lower than is desirable to yield reliable results. Moreover the correlation matrix analysed consists of Kendal taus, which is relatively unusual. However it is possible to make a simple target hypothesis arising from the assumptions and the theoretically derived hypotheses of the study: that there should be a separation of the two major strands of development, cognitive structural and psychodynamic, onto different factors, and that the structural factors should cohere as a single factor. If rotation to simple structure conforms to this hypothesis then confidence in the robustness of the analysis can be increased (Rummel, 1970).

The factors that emerge seem to be reasonably interpretable and conceptually coherent.

Factor 1 is defined by the three structural measures, (moral development: .79; ego development: .50; logical operations: .49), the new structural measure, (identity structure: .64), and additionally by introspection, (.44), and age, (.20). Thus it appears to be clearly a cognitive developmental structure factor.

Factor 2 is defined very heavily by ideology (.89), and additionally by small negative loadings on self-control, (-.25), age, (-.20), and introspection, (-.20). This seems to be a largely unique content factor of ideological orientation with a suggestion that this implies some external non-self directed concern.

Factor 3 is most heavily defined by identity status, (.80), and also by age, (.59), and identity structure, (.43), with loadings on introspection, (.33), and self-control, (.27). It is apparently an identity development factor.

The last two Factors, 4 and 5, seem to be defined uniquely by each of two components of temporal perspective. Factor 4 is defined by ongoing concerns, (.72), and the artefactually negatively related average time perspective, (-.59). Factor 5 is defined by maximum time perspective, (.76) and the artefactually positively related average time perspective, (.55).

This result, conforms remarkably well to the general 'target' hypothesis that the structural developmental variables form a generally coherent group which is distinct from another line of development, that of psychodynamic identity resolution. Of the conscious concerns variables, the measures of ideological orientation and of time perspective appear to be largely independent of the other variables, while introspection and self-control do load on the two major developmental factors. The clear separation of categories of variables on factors 1 and 3 is a confirmation and illustration of the pattern of findings in the earlier sections of this chapter.

CHAPTER FOUR - QUALITATIVE ANALYSIS

The methods used in this research make more material available than is actually used in the previous chapter. Each of the instruments and procedures employed permit of analyses other than those represented by the scoring procedures from which the quantitative results were derived. In this chapter some of these possibilities are explored.

The major source of data for this investigation is the detailed material obtained by the extended identity interviews. Typically in identity development research such intensive interview data are used in an idiographic manner. This approach could be adopted with the present data to entertain various hypotheses and speculations about factors involved in ego development, taking a case study approach to the interviews together with the other measures. However the primary approach employed in this study is different. It is a qualitative analysis, but one based on cognitive developmental structural principles. That is, it looks for evidence of a hierarchy of progressively more sophisticated structures within the subjects' reports of their concerns about identity. It then seeks to characterise these structures in ideal typical terms.

The interviews were extended from the basic identity status format, as outlined in chapter two and in appendix D, to explore with the subjects their conceptions of and reasoning about the kinds of commitments they had made or were considering. Topics were investigated flexibly according to the 'clinical method', in Piaget's sense, in an attempt to draw out the

essential features that characterised a subject's pattern of thinking about himself in relation to his commitments. The validity of this method clearly depends on the skill and sensitivity with which the interview is carried out, so as to derive important, accurate and unbiased samples of an individual's reflections on this topic. The methodological problem is then to derive from this material features which are common to subsets of individuals and are organised according to cognitive developmental criteria.

The development of these subsets from the interview data took place through an informal iterative process (see Selman and Jacquette, 1977a). The material was considered from a cognitive developmental point of view as it was obtained. This was naturally facilitated in this instance by knowledge of the findings of previous investigators with a similar orientation. The outline of a possible series of structures emerged as communalities were perceived about half-way through the interview series. The tapes were listened to again and transcribed in their essentials, including extensive verbatim quotations. What seemed to be possible essential features or correlates of those structures were noted for comparison with other interviews. A process of comparing cases within a potential 'level' and between 'levels' was carried out looking for common and differentiating features. Finally an outline of what appeared to be major features of those structures was drafted and a categorisation of subjects by stages was carried out. Four such levels of 'identity structure' were distinguished, and are described in this chapter.

The characterisation of these putative structures follows loosely the outline of interview topics based on the phenomenological analysis of commitment (see chapter one, and appendix D). These are: the central problem or conflict implicit to identity formation, and how alternatives are defined; the values actualised by choices and how they are justified; the epistemology which underlies how choices and beliefs are given meaning, and the character of the reasoning used; the nature of the self-concept implied by the structure; the sense of choice and responsibility resulting from that; and the sense of time perspective and relationship to a wider context characteristic of it.

Readers may find it helpful to have a summary overview of the essentials of the entire series of levels before embarking upon a reading of the detailed descriptions of the levels, with their accompanying illustrative quotations, which are provided in the following pages. Such a schematic overview is available in table 18 (p.179), in the section of this chapter discussing the 'identity structure' scheme. Consulting this overview at this point may provide a context which will make these descriptions more coherent.

The descriptions of the levels offered are 'ideal typical' and so necessarily rather general and sweeping. While the core of a level is proposed to be a conceptual structure the descriptions cast their net wider and comprise a mixture of elements, not only structural characteristics but also common themes and issues. Only some of these features will be clearly

present in any one case. Moreover, consistent with the general theory proposed, the nature of identity will also be influenced by other factors, in particular socio-cultural differences, and the dynamic status of the ego structure. This reciprocal influence of cognitive structure and psycho-dynamics is discussed later.

Certain 'themes' (money, satisfaction etc.) are naturally present at all levels, but it is how they are treated, in what terms, and in what way they relate to the overall search for identity that is important. Single statements should never be considered definitional of a level, even when they seem particularly typical. They must be seen in relation to the general context. Especially in discussing topics of common preoccupation, one will find statements characteristic of lower levels, but also those which may seem to be from higher ones, but which seem isolated or unexplicated or have a clichéd quality as if taken from somewhere else.

Describing such rich interview data in terms of discontinuous 'types' naturally forces it to some extent, since there is also a sense in which this is a developmental progression which can be seen as a continuum, especially so in the case of a topic like 'identity' where growth takes place over a broad front (cf. Loevinger, 1976). However the assumption of qualitative discontinuity is at least heuristically useful. Essential features and the idea of a core structure should be apparent from our descriptions, which are illustrated by accompanying quotations. These features are summarised and discussed subsequently.

One preliminary feature to note is the existence of differences in the quality of interviews at different levels, almost in the interpersonal 'tone' which they take. While these could be thought of as a 'methodological bias' there are more helpfully viewed as a valid product of structural interaction. The progression in quality could be schematised as follows: difficulty understanding the point of the more abstract conceptual probing, and a tendency to concrete examples in reply; a wondering about the questions, difficulty putting some answers into words, and sometimes a sense of surprise at oneself as one thinks things through; giving considered answers in response to an investigation of recognisable issues; a mutual appreciation of the validity of issues, a sense of dialogue and the loosening of the structure of the interview. Such features are, of course, no substitute for attending to the responses and are by no means always a reliable indicator.

Level I - Normative Conventional Identity

To give a brief overview, the first level in the series tends to be unambiguous and specific in the terms in which it defines its alternatives. The world has a 'solid' feel to it, and the self is defined by attachment to some particular option, a stereotypically viewed role. Such an option, in this university context, tends to be seen in terms of a goal toward which one is heading along clearly defined paths. Without this goal definition, confusion and depression seem to ensue. Most importantly there is little process of relating the qualities of the self to those of the goal, no perspective from which to

evaluate one's projects in terms of oneself. Beliefs tend to be cast in terms of right or wrong, and what is important is to be on the right side, following the correct path. The process of commitment is viewed as linear direct motion to positions of role attainment. This level is the hardest to illustrate clearly; the statements made by subjects are often commonplaces and anecdotes, but here in these quotes they are at their most reflective.

Definition of Alternatives and Associated Values

The definition of alternatives is considered in terms of concrete particulars, such as a list of possible jobs. The distinctions between them tend to be clear and categorical, and exist mostly as qualities in the job itself, rather than the person's evaluation of it. The most frequent bases for distinction here were those of status and of 'going somewhere'. The values and categories tend to have a clichéd quality.

S09 - My parents like that I'm going in some direction, not just meandering around taking courses here and there. That I'm getting somewhere [Interviewer - What is it you like about engineering?] Using your hands and using your mind; you can see what you're doing, accomplishing something for other people in the long run.

[I. - What about joining the R.C.M.P. appeals to you?]

S24 - What they represent. It's what the people of Canada want, protecting the people, protect the weak, serve your peers. I don't like to see people taken advantage of and bullied.

S12 - It's a big challenge here, you know, well, no-one in the family has ever jumped into university and graduated like from a profession, you could say. So in my mind that's part of the reason.

Paths to these jobs seem to be defined and laid out clearly in advance. Just as careers are graded hierarchically, positions in one's own development and choosing are ordered in a

linear sequence. The impression is of a schematic road map, of routes and branching decision points. There seem to be few alternatives, only those indicated on one's map, and there is no room for redrawing the possibilities, perceiving the situation anew. Things are as they are. Subjects do not say: 'I used to think this, but I felt that, and now it seems like the other'.

S12 - (chose law over teaching because) - What's the sense of spending five years in school and teaching high school when you could spend two more and go into law.

S25 - For the next seven years my life is planned for me. [I.. - You feel good about that? [Yes] Why?] Well it's not wondering what you're going to do tomorrow. (He proceeds to list what he does.)

S34 - A degree doesn't mean much when you go out and look for a job. You see guys with degrees just sleeping out in the streets. It's tough times now. Thought there must be something better to do. I looked around and didn't see much so I came up here.

S10 - I didn't want to work before school in case I didn't want to come, would keep putting it off. Education is very important to a person nowadays. At least with education you can fall back on being a labourer. They'll hire you before someone without education.

Even at their most 'searching' options seem to stay specific:

S24 - In a way my life's settled but I still wonder. Should I go for my Masters, leave school, buy a car, go out with a different girl. Looking for something better and I don't really know what's better. Hope I just settle into a pattern sooner or later. Just have these fantasies; maybe I don't want to admit I've settled into this route.

Mode of Choice

The outstanding feature of the structure, however, is how the choice gets made to go one way or another. It seems almost to make itself. There is little indication of considered values being applied to the range of choices. Values reside in the world, are part of the paths themselves; they are normative.

Alternatively the self has likes and dislikes, and abilities, desires and capacities. But the self is not assessed in terms of personal qualities or values in relation to the qualities of a vocation, there is little testing out of possible 'psychological' or 'ideological' suitability. Consequently comparatively little justification is required for a choice. Being 'good at' a job, or there being money, status, etc., appear as unelaborated themes, and are differentiated only as far as clichés, such as liking the open-air, or liking to do something concrete.

S34 - I guess I'll go in for teaching maybe. It looks like the easiest field. [I. - Why that?] I like kids and feel I'm good with them. It's a challenge. I have fun with them. [I. - What will it be like for you, teaching?] I haven't thought about it. I hope, I hope it'll be O.K. - not knock your ass over, have a good time, I guess.

S10 - (is trying to discover what he likes) - A dentist, or a doctor, biology, P.T. teacher, maybe psychology. [I. - How will you know which one?] If I'm good at it, and like it. I like being around people, don't like being stuck in some office.

S09 - (re engineering) - I'm interested in it. Do something in it anyway. I'll see what I'm doing. Not chemical; get into bridges or construction. You're making something.

[I. - What made you decide between them?]

S18 - I would rather be in the R.C.M.P. than a flyer, just wanted to be a cop rather than in the air force.

Selections are made sometimes by the exigencies of the 'routes' themselves, in 'natural' progressions. Prerequisites and course requirements can dominate. Personal 'connections' can be important, as sources of power. The mechanism of identification with particular figures - family, friends, heroes - seems common, in an unhesitating and relatively complete and unconsidered way.

For example S25 was originally taking science because he liked the 'mad scientist image' but had to switch to arts

because he couldn't attain the prerequisites. 'Now the world is all based on big business and that. That's what it's coming to.' Asked why he was taking law, his reasons were that a lower average was needed than medical school, it was good money and he didn't want to work in a lumber mill, and he had got 'connections' through friends of his father. He had an influential conversation with these men, describes the life of one and the problems of being coloured, but couldn't describe what it was that had been said that made law in particular appealing.

Core Problem

The major conflict or problem at this level, then, seems to be not so much choosing as achieving, making the grade, reaching one's goal, whether or not one has the power to get there. The necessary virtues are ability, power, and persistence once one has aimed for one's goal. Or alternatively one is hemmed in by intractable realities or deficiencies, unable to make it and so lost and uninvolved, unable to get on the right track.

S09 - You've got to make up your mind these days, so you got to get some pattern going for yourself, so just not waiting around for something to happen. Have to try to get something to aim for yourself, not many places going to do something for you now.

S24 - My main doubts when I was younger were whether I could meet the standards of the R.C.M.P. And really I still never know.

S35 - (of working in a restaurant) - I felt like I just wasn't getting anywhere so I figured I would go back to school. I was having fun, not making great money, not really acquiring anything. Wasn't getting any further in life. I sort of went to school - maybe you can't look at it like that any more - graduate, have a better chance of getting a job, sort of a stepping stone.

Structure of Belief

Ideological belief systems, where they are important, tend also to be clear cut. The world may be defined in rather black and white terms, and one's problem is to be 'in the right'. There is a 'side' with which one identifies, in a division of the world into alternative belief 'systems', although perhaps belief 'positions' is more accurate. Many subjects will express a series of opinions, pro-this and anti-that. There is not much sympathetic relating to a differing perspective, and so subjects come over as judgemental, and possibly intolerant.

A person has to tread the right path, the 'straight and narrow'. Thus this is the domain of fundamentalist religious belief, though these may also echo what are probably themes in earlier ego levels - a highly personalised God, and notions of immanent justice. Here rather it is being on the right side and sticking to it, living up to ideal norms, and aspiring to some end point.

The rightness of one's beliefs, what guarantees their meaning, and validates the self's stance is not an issue. Things are the way they are. 'This is what I've always known and it seems fine.' Alternative perspectives are dealt with by exclusion, being held at bay or dismissed. They are a threat, or to the more open minded a source of bafflement.

S45 - (re lectures) - Most of the things they say we don't agree with. Most of it comes from a worldly or carnal point of view, and I'll put it against what I hold. That's his opinion because he's from the world.

'(and later)'

- The grey which was before, 'cos everything's moving apart, it seems to be almost black and white and it's not hard to differentiate between what we believe and what they believe.

S20 - I think their religion maybe was 100% true but now I think it's completely false. (This is with respect to the Mormons; he now agrees with Bahai.)

- It takes in all other religions - all one - the church of man. Because of that I think it's 100% true.

S19 - You have to argue, or rather discuss with other kinds [of religious points of view]. I have an open mind. They say they have an open mind, but I have an opener mind. I take what they got, I say could be, I think you're wrong but could be truth in it. People who don't go to university tend to say I'm right and you're wrong and that's it, like my parents. You can't talk to them; this is that and that's fine.

(Both of these subjects are transitional, but still have rigid monopolistic belief systems, themselves.)

S26 - What I believe is straight from the Bible. Other religions they don't take everything in the Bible, disagree with some parts. I go along with everything. [I. - What about religion is important to you?] It's not right to ignore some of the law, only believe some of it. That's very important to me to believe all of the Bible.

S34 - I'm all for the N.D.P. - it's the party of working people. [I. - Politics are an important thing for you?] Oh yeah. [I. - Why is it?] I hate to see the country go down. It's the future. I want to see who's running the country. Don't want them to do something dumb that gives us a bad name.

'(and later)'

- You've got to have a good leader. Dave Barret [Provincial N.D.P. leader] is just like a gung-ho guy. He's my kind of guy..

S24 - Somebody told me I was more a conservative in philosophy but I feel I'm a liberal supporter. I admire the leader - he's a man that can handle any situation.

S26 - (about theories in college subjects) - Either I agree or I disagree. It doesn't confuse me. I just take them for what they are, don't let them aggravate me. Doesn't matter if they're true or not to me, just learn them.

[I. - You encounter a lot of different points of view here. How has that felt?]

S18 - Yeah. You see something one way, think you're right and somebody comes along and says no. Just can't see how they could come up with that. Gets pretty frustrating. Someone comes up with a different viewpoint when you think you got it tied away all nice.

S09 - Everyone got some sort of belief. Bound to think of something. 'Why are we here?' Some fluke of the universe. Easier to say some power did it. [I. - So you've asked that question?] No.

Beliefs may well be quite irrelevant to one's life, which is defined in other, usually vocational terms. In fact a feature of this structure is the lack of relationship between domains of possible concern. There is little question of what one area implies for another. Also identity seems to be primarily defined in terms of a single area of concern, perhaps necessarily if it is structurally difficult to integrate across areas.

Concept of Self

The sense of self at this level seems to be dependent on being fixed within a clearly defined world with a set of concrete goal options and normative values. It is particularly common in this sample for one's identity to exist in relation to a goal which has been set and toward which one is headed along a clearly delineated path. Without such a goal one is lost, trapped and anxious. The capacity to tolerate an ambiguous situation, and maintain a sense of oneself, of one's power and value as an individual in it, seems limited. Often these subjects know this much about themselves. They may point to others who lack this direction, denegrating it and expressing surprise.

The implicit answer to the question 'Who am I?' is then of the form - 'I am on this path', 'I am aiming for this goal', 'I occupy this role position', 'I belong to this group'. The answer is categorical. And the goal or role has an 'external' quality, because it does not arise out of, or relate to self-

assessed internalised standards which the individual can consciously reflect upon. The self is, as it were, 'locked into' its world, and gains stability by the stabilising features of its external relationships. Identity is location within the world, and if it becomes problematic it is only because the world is unclear, or unsatisfying.

S12 - I'm glad I've narrowed it down to that. I'm not looking around all over the place. I'm sort of more specified to one thing. I'm leaving it that way. It's nice to be able to say that is what I'm doing if someone asks you. [I. - What if you don't have that goal?] Be just another body floating in the stream of school. [I. - How do you mean?] Younger people are just sort of up in the air - me having set my sights more definitely feels nice.

S18 - If I didn't have a sense of direction I'd just sit there - 'What am I doing?', you know. I wouldn't go to university unless I knew what I was doing, 'cos I think I see a lot of people in this place just keep taking classes and classes 'cos they don't know what they're going to do. Think that's about pointless. You learn more if you have a sense of direction that guides everything. Need some kind of direction, some aim, or it's just going to be a waste.

S10 - I'm always headed for something. I like a definite goal to be headed to. [I. - And if it wasn't there?] If I didn't I'd feel very lost - like walking around in a daze or not really sure what you're up to, so you feel very lost.

[I. - What does it feel like having this commitment (to his religious beliefs)?]

S45 - I've got a purpose in life, some reason for living. I know who I am and what I'm going to be doing. And I guess a lot of questions people have about who I am, what I'm here for, all the major questions people ask, these I've got answered. What I believe has already fulfilled all that - I didn't have to be worried about it. I've a sense of direction in other words.

Having such commitments is often contrasted by those who have them to other stereotyped groups who do not.

S09 - There's loads of cornballs, guys go out looking for a fight, partying, flunking out, rather than go and have a good time, do something constructive.

'(and later)'

- Know a lot of guys doing that [having no definite goal]. Might learn more than me, but wasting \$220 a semester on

bullshit. Can always bullshit about things they don't know about.

In contrast to the lack of search for 'identity' as a theme, a 'sense of self' in terms of agency is very much present in the themes of power and control. This 'I' (rather than 'Me') does what needs to be done, tries to reach the goal, has the ability to get what it wants. Or else is subject to the way things are, stuck with it. Control over motion through an external world is an important metaphor.

S09 - It all depends what I make out of it, it's up to me, depends what I want to accomplish and what I put into it. Need to do yourself justice, using time to get something accomplished.

'(and later)'

- You need to set a pattern of ideals, know what to do. Have to set down some rules so as you get things done, get things done so you can get somewhere.

S12 - If you want something, no matter what, you can attain it. If you put out enough. Whether that's good or bad.

S34 - I couldn't get into a trade, 'cos I'd no previous experience and no connections. Lots of guys trying. Would've been set up, being independent. Could've enjoyed yourself. But I would have to come up here.

Responsibility is not a theme. When asked about it is seen as to oneself and one's family in the sense of achieving one's goals, and living up to expectations. Commitment seems to be understood as something that happens by virtue of being at some point on a path, when one has taken a certain branch point.

S24 - My major responsibility is just achieving it. Don't blow it. Drunken driving or something.

S09 - After first year engineering you're committed. [I. - How do you mean?] Heading towards a definite goal. Before that there's lots of ways you can go. [I. - What is commitment?] To commit yourself you have to be heading towards something, have to be heading somewhere, have to be ready to put yourself out for it, have a goal, something you want.

Given the frequent focus on a goal, time perspective is surprisingly limited, and the conception of some end state rather rudimentary. In the absence of goals time perspective is limited to the very short term. Visions of future life-style are stated in concrete terms - a house, a family (happy), social position. A sense of personal change is largely absent, possibly seen as threatening, at most more of the same.

[I. - What kind of life do you see yourself living?]
S09 - One I've got right now - only one I know. Middle class - not too bad, it's alright. [I. - And do you see yourself changing?] Settle down, complete some more things, know you're into more things. Not know how to say - mature.

Level II - Emergent Self-Aware Identity

At this level it appears that a decisive step is taken away from embeddedness in a system of ideal normative expectations and concrete alternatives and into a new capacity for self-perception that is a major structural advance. A perspective is attained that allows the self to be compared with cultural norms, and for a changed sense of the self's personal qualities, an emergent criticism of self and others, and a matching of personal qualities and potential goals. This results in a major theme of self-fulfillment, although in unelaborated terms. This is accompanied by a move away from the more categorical thinking of the first level towards judgements made on dimensions of comparison, which permit and encourage the toleration of ambiguous situations. There is often a reluctance to make hard and fast judgements and a desire to freely explore the possibilities available.

Core Problem

The essential problem at the heart of identity formation at this level is discovering one's right place in the world, the place where one can 'be oneself' perhaps, or 'be happy'. People are trying to find their own thing. Alternatives are assessed as better or worse approximations to this right thing. One is looking for a 'niche'. The problem is knowing what this is, and feeling assured that it is the right one for you.

[I. - You feel assured that you'll find it?]

S39 - Oh I guess eventually. It's got to be out there somewhere. Everybody finds their own niche in the world. Might take longer than I expect. Guess it has taken longer compared to some people.

'(and later)'

- Sounds like a pretty idealistic job. Whatever it is it'll have to be some kind of compromise to it. Hard to find. Hard to find one that I enjoy and has all those things [i.e. qualities he has just listed - money, have pride in it, challenging but not too pressured]. Hopefully what I do get will have enough to satisfy me.

S46 - When I make my choice, find my career I'll know it. Don't think I'll have five different choices - Gee, which one? When one comes along I'll be able to say this is the one that's right for me.

S23 - It will be hard to decide. Realise I will have to make a choice and might want to choose more than one. Being who I am. Won't know which is the right one. Don't have time to explore everything. I think it will be hard. But when I choose I think I would do that. I'd have researched it enough.

The process of choosing primarily involves search and discovery. One casts around, is open to possibilities, perhaps tries different experiences until something suitable turns up. A model of this choice seems to be that alternatives are assessed by a kind of matching process. They are measured alongside the sense one has of one's personal qualities, traits, preferences, values, to produce a kind of correspondence (no

doubt with great individual variation on how exacting one is).

S11 - There's some things I'd like to get my fingers into. Have to see what happens. Never know what might come along. Maybe I'll be doing work that's different. See what the future holds.

S39 - You can keep looking at jobs till you find one you like, but I always want to find out about other opportunities that I don't know about. So I figured I'd come up to university and that'd provide a little more insight and knowledge that'd help along the way.

'(and later)'

- Some people come up and say I'm going to be a doctor or whatever. I didn't have any definite idea. I wanted to find out before I made any rash decisions.

S27 - By taking a variety of courses at university you'll find out what you want to do. Nowadays when you're lost and trying to get your head together you drop out and don't do anything. People seem to think if they just don't do anything, travel, they're going to get the answer just like that. For me it just got awful boring after a while.

S23 - I'd like to help people. If I could do a couple of things that made me feel good about what I did. I'd like to go into teaching but I don't know if I have the nerves for it. Need a cool head for teaching.

'(and later)'

- Working with children appeals to me. [I. - How do you mean?] I get along with most people pretty well, but around people my own age I get a bit moody. With kids it's different, I don't find myself so moody, I'm more content. I think I've got a little bit of a kid inside that changes me when I'm with them.

S33 - Traditionally I was a very introverted type person and going here to college and whatnot has made me much more extraverted and now I'm at a level where I can relate to people a lot better and I think that's what social work involves, relating to people and understanding their situations and trying to help them. And that's where I want to go. Can't tell you why, that's the way it is for me.

S15 - It's a choice and you have to live with it. Got to be something I want and something that suits myself if there is such a thing. So if it's inappropriate or something just going to make myself miserable, and not do a good job, start to lose confidence in myself, not sure or myself, and everything starts to go wrong.

Within those subjects classified here at this level there seem to be differences in developmental sophistication, that may represent continuous structural progression. Some subjects, closer to level I perhaps, seem to concentrate on the consideration of alternatives as goals per se, but searching for the most appropriate or satisfying one. Others are involved in a greater degree of self-assessment and personal reflection in the process of making this choice.

Associated Values

What the person hopes to attain through these choices is 'fulfillment', personal satisfaction, and happiness. This is of the greatest importance, but such a notion as fulfillment remains rather unelaborated; it cannot be often articulated greatly beyond concrete preferences. They may comment on the shallowness of other peoples', or their own earlier, points of view. Commonly associated with this idea is that of personal development, understood in terms of expansion, broadening, the accumulation and widening of experience, the ideal of being 'well-rounded'.

A common theme as the modality of fulfillment, seems to be 'helping people', sometimes in similar terms of their development (although again without much elaboration of how to help, of their motives for wanting to, or of the problems with doing it). They may be stereotyped rather as 'do-gooders'.

Another non-structural theme which peaks here is the concern that a job not be boring, repetitive, or stultifying. There may be expressions of a general undifferentiated curiosity, a fascination with many things and a desire to find out more. Education is often prized 'for its own sake', as an end in

itself, and there is less tendency to denigrate it as a more or less essential means to a separate end.

S11 - (re being a policeman) - When I was a kid I was always jumped on by others. So now maybe I'll do something to help somebody else. I like to help out the underdog - wouldn't want people to have to experience the same kind of thing I did. [I. - How will you know that is right for you?] Got a feeling - got to feel happy and fulfilled, got to help people. Wouldn't feel right if I'm not - like a monkey on my back - got to sleep at night.

[I. - What did you get out of working with kids?]
S42 - Lot of personal satisfaction. Lost money doing that but my patience improved and I learned to communicate better by providing examples and looking at things from their level and making myself available. I'm trying to find out if teaching would be O.K. - to know working with kids and people. [I. - And what would it be like?] Get more insight, learn about myself, patience, think about my creative abilities through watching them, make me more aware of myself and enjoy helping people.

[I. - What do you want out of a job?]
S27 - Not status, personal satisfaction; not having a big house, knowing that I got something out of life - yeah, that's it. [I. - How do you mean 'satisfaction' and 'getting something out of life'?] Don't really know, sort of more of a feeling, like you finish a hard job and it's done and it's sort of a good feeling. Couldn't pin-point it - if you do A, B, and C you'll have a fulfilled life. [I. - What will it be for you?] In my case it would be working with people or helping people. Where I thought I could be doing some good for the rest of society. The world is in sort of a mess - be fulfilling if I could tell myself I have really contributed to the world - I've helped, I didn't just survive and live, after I'm gone some effects of what I've done resounded.

S15 describes his previous orientation as: 'as long as I got a three piece suit and an office downtown' whereas now it would be: 'being complete, where you can appreciate yourself, appreciate things around you instead of just living a half life'.

S32 - I don't think the big job is suddenly going to plop on the desk - if it did I would jump on it. [I. - What would it look like?] Have to be interesting, in the way where you're not repeating the same thing over and over. Something where you have to think.

S31 - I don't want an ordinary job, just a rut, kind of 8 to 5, routine with no impetus. Gets to be repetitious. Education keeps the mind awake and alert instead of stag-

nating. I think you could describe it as changing. [I. - How do you mean?] I guess I'd describe it as doing what a person finds most fulfilling.

S41 - (of his major at college) - Even if I don't get a job out of it at the end I still have the knowledge of my own that I can use in the day to day situation.

S40 - (about college) - I get more understanding about the world. So far I've got a very narrow look at it. The things that interest me are the things I can relate to.

[I. - Why do you feel an open mind is a good thing?]

S27 - You're just a better person for it. Never learn anything. Sort of fall into a trap. Won't develop I guess, won't progress, just sort of stay on the same level.

S32 - (about college) - You get a whole different picture of the world. I like to know how people thought - world-views. Interesting. Not to get a job, but pure interest.

Structure of Belief

This exploratory quality is part of a more flexible world view characterised by 'openness of mind' and a wish to admit and examine different points of view. Everybody is felt to have a right to their own opinion'. Beliefs are right if they are right for that person, so there is a concentration on personal position. There is a particular sensitivity to proselytising, whether of forcing one's opinions on others, or of being subjugated to this by them. (While this is a common theme it seems almost universal at this level.)

The form of thought gives an impression of being in terms of dimensions rather than categories. These subjects think in terms of continua - more or less, near or far, rather than right or wrong. There is an attempt to find a 'happy medium' between differences, resolving them by balancing and compromising. Thus there is an eclecticism of truth and belief - putting many views together, taking the best from everything,

finding a good mixtura. This permits flexibility and toleration of ambiguity; and sometimes a delight in it, a pleasure in mystery and that one can't be held to absolutes.

The weakness of this structure is the lack of a framework for the possibility of a coherent conceptual system of belief. There is difficulty handling conflict and contradiction, and a confusion about whether there is or is not a right point of view, some valid concept of truth. The openness can appear rather superficial, a failure to take other possibilities seriously, perhaps having a rather defensive quality. There may be a cavalier attitude towards evidence, and a difficulty using abstract concepts readily, still falling back on illustrative anecdotes to answer questions. There may be a sense of the subject discovering his own ideas for the first time in the interview. There may be a mistrust of theory as opposed practical experience, and a feeling that questions and situations must be dealt with on an individual basis. Topics are characterised by issues (rather than sides, or systems). Although separate domains are more available for 'cross-referencing' with each other there is still little sense that integration of different facets of identity, activity and belief is an important problem.

S27 - I've always tried to keep an open mind. People tend to put things down just because they don't know about them. I'll never do that. Who am I to be right all the time.

S39 - I don't have confidence in myself to have such a strong position that I could force it on other people, try to convince them of mine. You have to look at both sides before you've actually found out about it.

S11 - (about college) - There's all different view-points, different ways of thinking about things. I can sort of fit in things. I've kind of got thoughts deep down, and lo and behold they're being taught. I got a curiosity, a drive to know why and get down to it. I like introspecting, sitting back and thinking about things, and looking around in

everyday life at things and seeing where this fits and that fits.

S11 - I'd never be able to label myself a disciple of one or the other. Maybe kind of lean towards one, but I'd think even then, maybe change my viewpoint after I get some more input. Look at a hundred people you get a hundred different reasons. You can only generalise to a certain extent.

S32 - I talk about a lot of different issues. Not that I want to find the answer, but just how come people are so opinionated about them.

S15 - Actually I've pretty well made up my mind what I want to do but I like to tell myself I haven't decided - just like I pretend to be open minded!

S42 - (after discussion with 'Hari Krishna' followers) - I remembered what I had read that no-one goes to God except through Jesus. He's the truth. There's no getting around it. There's no grey area. He's the only way to life. But still be open to others views.

S39 - Most discussions about things have their right side and their wrong side. Like don't think I could be biased enough on one total side to say my side is right and yours absolutely wrong. Have to look at both sides and couldn't convince myself all in one way.

'(and later)'

- Some people have a righter opinion. Opinions have different parts. Some seem strongly right to people and others they'd rather not have brought out because they're weaker. Each one has a percentage of right and a percentage of wrong. He says he's right and I say I'm right, and the true right is probably more of both together. Neither can be totally wrong or right.

S11 - When you come down to brass tacks opinions aren't that different. Get to a plane where they start off different but end up the same anyway.

S41 - There's lots of unanswered questions. Big professors are so smart but some questions that they can't answer. I'm glad. Something holds it all together and they can't define it, and I hope they don't.

S15 - As far as truth is concerned it makes you wonder. But there has to be the truth. Maybe not for us to find out. It's in the computer or God or a math. formula. Don't think at this time we are prepared or equipped to find out what the truth is.

Politics generally seems to be rather disregarded, although there are feelings that more ought to be known because

they 'affect one's life'. But frequently religion arouses great interest, fascinating those who don't believe, and creating grounds for conflict. Belief and practice are personalised: it is something that 'works for them'; institutional worship is quite dispensable. It is discussed often in 'issue' terms, around the credibility of particular doctrines or practices. The quality of living, in relation to professed belief and the possibility of hypocrisy are often salient.

S41 - I share the same [political] views as everybody else. Things aren't going the way they should be but I can't think what to do about it. Maybe if I sat down and thought about it and heard others views I could come up with a solution nobody else has thought of, but I doubt it. I don't know the solution. It's easy to mouth off. I haven't come up with any myself so I shouldn't criticise.

S41 - I find myself believing in a higher being - as to strict formal religious things, no. But I feel there is a higher presence - maybe all the free energy of the system, maybe all our psyches or souls joined together - something.

S32 - Lots of times I curse organised religion. Sometimes I just feel religion should be a free feeling. Instead of letting you grow its stifling and binding you in a way which I think is wrong.

'(and later)'

- It's done me good. Looking for something and it seems to have filled some gap. I don't know. Maybe it's good that I don't know. [I. - How do you mean?] 'Cos you're not supposed to know everything. People try to empirically prove God exists - just a bunch of garbage.

Concept of Self

The level is marked by the emergence of a 'psychological' self from the ground of a normative social world. That is, there seems to be a new level of self-consciousness, which is often expressed in terms of general behavioural tendencies and trait-like qualities. But this remains relatively rudimentary, often groping for expression or using rather simple or clichéd terms.

One is sometimes reminded of pop-psychology and 'self help' books. Thus it still lacks much appreciation of the complexity of the self, or penetrating self-criticism.

But concomitant with this self-differentiation is a growing capacity to 'see through' the normative clichés and idealisations of the social group. There is greater awareness of the ways in which real behaviours, both others' and one's own, fail to live up to ideal standards. Often there is also a pre-occupation with hypocrisy and phoniness. This element of doubt and questioning thus emerges together with self-consciousness, and frequently with a fascination with other people as individuals (who are often referred to as valued over systems of ideas). There is also a concern hinted at about freeing oneself from expectations and normative conventions, about conformity and non-conformity, an uncertainty about fitting in but a need to find one's own thing.

S40 - I think I've been developing understanding - of other people. Within boundaries I find my own happy medium between each value and hope it's enough to get through. My ability to try to untangle things is getting better, and to understand me myself by myself and with the help of day to day life, L. [girlfriend], school, home, and anybody I come into contact with. So I hold things like that valuable and try to live as much as I can to help myself, and if in the process of helping myself I can help others that's great.

S11 - (re capital punishment) - I don't have the knowledge to base an opinion on right now, just sort of feelings. Everybody's got vengeful feelings - got to rationalise them.

S32 - My mother and I we're really nervous types. We just think along the same lines. You know the 'elements'? We're both melancholic, that's the dominant thing.

[I. - How has [religion] affected your sense of yourself?]
S42 - Would be I'd compare myself to other people. Now I see myself as a person who was myself and the only person that was ever going to be like me.

S40 - It's hard for a person to stand out from the crowd, that he wants attention. I worry about being self-centred, and not worrying about other people.

S22 - Sometimes I pick up that trait from him [his father] and I down things, find myself downing things left and right. Nothing perfect, you're saying, cutting it down or something. Need to get on my own I guess and figure out my head.

S11 - I sort of wondered how come people act different than they're supposed to. I didn't realise people are human. I used to be very strict with myself.

S27 - A lot of the world is an act - conforming to the norms. People build up an act, walls. Got to relate to people for your own good - not let it build up 'till you crack.

S31 - If I was a lawyer I'd be in a position to help others, but I guess I question that because I'm helping myself. Feel the temptation is always there and I'd probably abuse my power also. Hard thing to say - rationalise to myself that it's quite normal.

S22 - It bothers me when I hear people shouting off when they don't know anything. You hear people - I guess I was as bad when I was younger. People are really influenced by parents, but my father's a business man and you know they don't read newspapers, they just come out with these things and you go 'wow, where did you pick up these ideas?' No point in arguing with them - it's hopeless - I just sit back and watch. One of the things I enjoy is the study of people. Look at a person and figure out what he's like. I don't like to find people contradicting themselves and being hypocritical. Guess we're all hypocritical sometimes.

'(and later)'

- The biggest thing is not to fool myself. Always catch myself fooling myself. Guess that's my biggest responsibility. 'He won't mind', or 'Heck, I can do it tomorrow' type thing. Bothers me. Get into the habit and it gets worse and worse. Just being honest to myself.

S41 - I got a sort of idyllic view, funny view, sort of fairy-tale almost, like what I want that's what's going to be, and I'm pretty sure that's not what's going to happen. So I'm going to have to look and see. /

S40 - I've no great ambitions - just to be happy, enjoy what's happening. Of course you have to play the society thing, have to play along, and do things to jibe with everyone else, and conform to a certain extent. But I can unconform by doing things like running. I can do my own thing, feel good about myself through training and getting enjoyment. A lot of people try to get too much out of a big

thing, though I've got my own ego thing, got a little sports car - that's my own little thing, not hurting anybody else.

Mode of Choice

The sense of choice involved in the process of forming identity commitments is that of hunting around, almost of waiting for something appropriate to come along. Thus there is a sense of the element of chance, but also a sense of conviction that the 'right thing' is waiting somewhere to be found. There may sometimes be some distrust of closing off to possibilities, being trapped in some stultifying situation before something really right arrives, but there is real desire for, and anxiety about the lack of clear self-definition. There is a risk of not finding something appropriate or of discovering one is wrong, and so it may be felt useful to have 'something to fall back on'. Commitment would be discovering a suitable match for one's personality, values and self-images. One is committed to the degree that the compromises that must be made are small. The perfect commitment should be there waiting to interlock with one's own qualities, but commitments are also seen as extrinsically useful to organise one's energies.

S22 - I guess I just have to wait until I figure what I want to do and settle down. [I. - So you're looking for the right thing?] Yeah. I know I want to make sure what I do I enjoy because I know if I don't I probably won't do it for a living. Get tired of it quick. [I. - How will you know it's the one?] Just got to hope it's born into you. It just comes to you like (laughs). Just finding one. Find just working here and there and find that you want to do this and it's time to try and settle down and give it a shot. I guess it just comes to you.

S41 - Right now I'm in no real danger of suddenly finding myself stranded and 'here I am, what can I do now', and I'm just going to slowly build towards things. I don't have to make any real decisions for three years time. Hopefully I'll

have decided something by then. A few more years of school and I'll have a better idea of what's going on.

S32 - That's what I'm afraid of, just sitting in the middle doing nothing - such a waste. If there's one really deadly wrong thing you can do it's do nothing. But it seems like we're so geared to do nothing.

S39 - If I knew that this was it I guess I'd be committed. If it was say 90% of the way I wanted it then I'd give it 90% commitment, if there was something else I might find could give the 10% to looking.

S42 - The way I describe it is I had a God shaped hole in my life - a lot of people do - and Christ came and filled this hole, and I became rounded out, more open, a better person.

Level III - Systematic Self-Aware Identity

The third level represents the development of more structured and systematic thinking about the self and the world, and the tendency to construct a more coherent perspective integrating both. The differentiation of self at the previous level is refined and articulated further. This involves the emergence of a framework of ideals and self-chosen values against which the self is evaluated. The abstract conceptual capacity to search for and integrate new values results in a greater sense of agency, and the need to justify oneself against these ideals. Thus there are prominent concerns with achievement, self-respect, and responsibility.

Core Problem

The focus of choice at this level is implicitly to find a system of values, a point of view, and a set of goals which can be mutually validating and be within the individual's capacities. He may thus be engaged in an exploration of issues and problems

relevant to himself and his life. This may take on an ideological quality. Because they are more conceptually 'worked through' these standards and values seem more complex and more personalised; they have a more 'internalised' quality of being 'chosen' by the individual himself. Goals, too, seem rather more flexible since they exist within some context of evaluation and so are subject to review in terms of it. But in general the person is faced with a problem of integrity and validity - of the values and standards he espouses, of the goals he selects in terms of those values, and of himself, his capacities and performance in relation to them.

S47 - I see people who are engineers and their life is the shits - family life and social life and they're up-tight people who are so messed up that though they have positions and good pay their life isn't worth anything anyway. I'd like to get away from that and do something I'm happy with. So I'd like to do something with people, or publish some book which would have something to say. Something along those lines. Maybe I'm aware of what's happening. I've felt something wrong with what's happening - that there is a better way to live. Just sort of searching around for the answer or the truth, try to find out. A lot of people are wasting their time doing that but I want to arrive at it and explore it in writing and reading, presenting it to other people.

S02 - (re his religion) - Something that important should stand the test of any investigation and if in the process of investigating I found something different to believe in there's nothing wrong with that. My beliefs shouldn't have to be insulated and protected lest they be destroyed. If they were, they were false beliefs.

S03 - It all depends where peoples' values are. Some are into the work ethic, others money, looking out for themselves. [I. - And you?] I think it would be better to do something for society. I'm not into competing, though I am with myself - what I do I like to do my best - and money doesn't excite me, I don't need excess. The most important thing is to be happy, and do something important to you.

'(and later)'

- In a sense I'm kind of at a cross-roads. Like I'm inclined to think life is just for the living, for the moment kind of. Sounds like I'm out for a good time kind of

thing which I don't necessarily agree with at all. Just don't think anybody is anything too special, we're all just little cogs in a big wheel type thing - somebody dies tomorrow and it doesn't mean a thing.

S21 - Yeah, it's possible to get a choice wrong, possible not to analyse yourself and get it wrong, just jump into something. But something you give a lot of thought to, I don't think that can be wrong, no matter how miserably you fail. If you figure it's right then it can be done. But it has to be done unbiasedly. A lot of people have thought and done very wrong things. Don't let personal opinions and hang-ups get in the way.

S48 - (re college curriculum and lectures) - Conscience plays a very important part here. Students have to look objectively but they have to make some kind of judgement on their own. Can't just take it as facts. Maybe it doesn't matter what judgement, but they have to weigh it in their own minds. Unless they do that I don't think they're fulfilling their duty as students or even as complete human beings. [I. - How would they do that?] Difficult task but a task people take on as long as they're going to know anything about this world. I feel personally that the world is disintegrating. Unless we start making moral decisions, unless we try to learn as much about decisions made in the past, develop objectivity, a kind of restrained objectivity - have to look at opinions but you also look at facts. But a lot of people don't try, just tuning out, forget about everything, to escape.

S16 - I'd like to think I'm intelligent enough to figure out things for myself, but I realise that I'm affected by things whether I like it or not - what I read, what people say, T.V. - whether I admit it or not. [I. - So how do you know you're right?] I think I've got a system of beliefs that guides the way I act, and I think the way I act, when I act, I'm considering others in my actions. When I act I satisfy my ends in a way that hurts people as little as possible.

S47 - (re Christianity) - I still believe in God and that it has the answer. [I. - How do you mean, the answer?] Well, a way of life that produces something concrete and is not just a waste of time and a waste of life. I feel like answers of where life is from and where I am going are important to me right now and I feel people should ask themselves that. [I. - Why?] A human being in order to be human should ask these questions. If a person just lives for mere existence and survives for the rest of his life without thinking why then I feel his life has been wasted - not wasted, but there's something missing if a person doesn't ask himself that and goes into it to find out. Man was given intelligence to think and I feel there was a reason for that - to go into it for himself and eventually find the reason for that. Come to some state of mind where he knows why he is here, feels comfortable with himself

being here and lead a life like that. Most people when faced with the prospect of death they just totally freak out and can't accept it, yet they don't know why life has been and I feel the man who finds answers to his life and leads life in accordance with it I feel he can sort of defeat death because he's ready to die and knows why he's been here. Most people didn't do anything in life that would make it worthwhile or useful but just hold on to it for the sake of holding on.

The problem that is definitional of this level for identity is therefore self-justification. An individual can compare his goals and choices to a system of personal values, and himself to a set of standards that he feels identified with through choice. Thus he does not seek simply 'involvement' but self-respect, a sense of earned self-worth. He must successfully achieve in terms of his standards, and there is a general concern with achievement, getting somewhere, doing well, and also with integrity, doing something worthwhile, not wasting one's life, contributing. Thus there is a general sense of responsibility. Personal fulfillment is still a major theme but it seems further elaborated, both by the addition of this self-justificatory element, and by there being a more articulated conception of what fulfillment might mean for that person in practice, what about the alternatives are appealing and satisfying.

There is a sense of search for an appropriate way to live one's life, and a looking to values beyond the self and its immediate experience to relate oneself to some wider context of values. Job and life-style may be related to broader questions of personal and social ideals, a sense of the relevance of one's own choices to other people and the social structure. This can be a source of conflict. There tends to be a general sense of some 'moralisation' of identity choices.

S02 - People come to university for self-improvement. If they feel good about it themselves it doesn't matter what their mark is, if they've learned something. But I realise my expectations of myself are much higher than the school's standard, and I don't want to let mine slide down to that level. I think I have an idea of what I'm able to do and want to keep aiming for that.

'(and later)'

- I do fear that I've become complacent and satisfied with where I am, and I feel that as long as I'm not, and look toward, if not a better future, a new one then probably I'll be happy with life. Hope I don't get entrenched. I'd hate to look back and feel I hadn't done anything.

S02 - If people lost their respect for me by my not living up to what I say that would hurt me as a person but that's not the real hurt - it's that I wouldn't be effective in what I wanted to do.

S48 - I wonder what is the use, what is one person in so many millions of people. Lot of times I think it's just so meaningless, it means nothing. I don't want to just exist I want to live. I don't want the Canadian dream of a nine to five job but I don't know if I have the talent for anything else. Nowhere again, just left high and dry.

S16 - It's really important as far as my own motivation goes that it's doing something worthwhile. All these people around with potential to help the world. And if I can help them improve themselves through school to the point where they can help the world out, maybe through helping them I'm helping the world. [I. - What will doing that demand of you?] Being true to myself in the classroom and doing the best job I can for students, being as good a teacher as I possibly can. I'd like to be the best teacher, whatever that is; probably I'll find out. I mean not just being a teacher, it's not good enough for me just putting in the hours like some, I want to be a good teacher. [He has earlier made it clear that he has thought about the relevant qualities and skills he believes are necessary.]

S21 - If I can be successful at this [career] it will be the ultimate in self-satisfaction. I've got an ego no question - if you don't have an ego you have no self-respect. Some people have inflated egos, but...

S04 - (re 'fulfillment') - Yeah, doing something that you want to do and doing something that can gain a sense of accomplishment from. That accomplishment is not measured by other people, it's something internalised, like you know you're doing something good. [I. - What do you mean 'good'?] When you've used your abilities to leave somebody better off than prior to meeting you. [I. - Why is that good?] I think part of the purpose of people on earth is to accomplish things, to help one another out, to be kind to the

best of your ability. You can't just enjoy yourself. Better to be out giving someone a hand at doing something. 148

S16 - The way most people live is lazy, shows flagrant disregard for the environment and their fellow man, solely concerned with themselves and don't realise how stupid they're being. I hope that no matter how bad we're behaving something is going to stop us before it's too late.

S17 - I used to feel like the centre but now it's more a part of the whole. Everything revolving around me, now more or less a building block, part of being total but not the most important. As my experiences became greater in scope I realised I was not geared for my own personal satisfaction.

S21 - How can I be happy with people starving of drought in Africa? Shouldn't be perhaps but I can. Just don't believe there's anything I can do about it, except doing my little piece in making movies. Could go into politics but then I'd be cheating myself because it's not what I really want to do. There must be an interrelation between what you want to do and what you want to do for other people - that's really the core of everything.

S03 - My main value is not doing anything at the expense of anybody else. [I. - Why is that?] Because it ties into cooperation. If we want to blow each other up we can, but if we want to live nicely together we've got to cooperate. That's why we need a social order - laws and so on. [I.. - And does that imply the importance of a sense of community?] Well, in an abstract sense I've got a sense of community - all men are brothers, we should share with the world - but not so much in - - I like people more in abstract than I do in reality.

S48 - Most of my friends just talk about booze, and movies. O.K., but it's the extent, nothing else. Don't know the real problems in the world. I don't think you can really live if you're just going to forget about the whole world, live in your own shell.

Structure of Belief

People's thinking shows development towards a more systematic structure. There is an attempt to put things together, a sense of the possibility of some coherent perspective relating different areas. There is a capacity for more ideological modes of thought and for referring to ideal possibilities. There is a stronger tendency to reason from the general to the specific and

theory is valued more; subjects are less limited to concrete example or caught in the complexities of the single case. Social criticism is more common, and the deficiencies of current realities viewed with horror or concern.

Thinking is more an issue here of seeing and resolving contradictions. Thus arguing issues out, engaging in a debate would be enjoyable. Others' views can be compared and judged against one's own, and reasons and justifications evaluated. This process then has a quality of looking for answers, a more actively questioning stance. Also there is rather less sensitivity to proselytising and perhaps a desire to share one's ideas with others, to educate or even convince them.

Knowledge may be viewed as a tool, to be applied to the world and to life, and to aid further learning. One is engaged in a process of developing a view-point, and this is also a skill that can be acquired, perhaps requiring organisation and method. A sense of active self-control of this process may be important. Education is seen in the light of all this. Relevance, the relationship of beliefs and values to one's life and to wider questions, is an issue.

S02 - There's only one law that's important in the world: that you respect other people. After that every other law falls into place. With that in mind you can make a right choice, satisfying you but not hurting other people.

'(and later)'

- I didn't realise until I got into these interviews that Christian beliefs were fused with my daily life but everything comes back to that in my mind. I've a commitment to this idea of service to other people. It seems to be the one way I can express thanks to a God that gave me life. That sounds a little fundamentalist but I'm here and I recognise a Creator.

S03 - Theory is obviously important for understanding and as a way to fit things in, but if you don't have a notion

of what you want to do, say as a teacher, you won't do anything. Just whatever's thrown at you; won't fit any pattern. Whereas if you know what the objective is and sit and think about what you're doing, it makes everything fit better, I guess.

S16 - People should be able to enjoy the world in the future better than we're doing now. Being concerned with the implications of my actions will help me to keep the world lived in.

S04 - I started off thinking 'this is the way'. Now I realise there's no one answer - I'm in the same position as the guy who wrote the book, or down in the field. So when I tell people there's 'multiple factors' and get into it and try to explain it they're not interested. I recognise that I'm becoming one of those people who can't offer any answers. [I. - Where does that leave you?] It leaves me wanting to continually explore possible answers.

S21 - I like what's written in the Bible - it's humanitarian, humanistic, a thing that's working for peace and that's what we should be working for 'cos it's going to get the best results. My religion and my political thought are all tied together in one very loose package, it just depends on my mood almost what I'm going to say. [I. - What would be the core of it?] The pursuit of happiness. Two things - first of all to make a success of life and to be happy, to do that, to make sacrifices or whatever, otherwise it's been a waste. And if you can be happy it's to make others happy.

S37 - I almost feel as if I've gone through a coming of age period and I think it's time I came up with some definite views on the world around me.- politics and other things like that. This is another reason for coming back to school.

S02 - Our society; the first world of capitalism, is wrong because we have so much when others have so very little. It's not even necessary but people have to come to the same frame of mind. But I must admit I'm trapped, wouldn't want to be on the other end of the scale and wait for something to happen. And I don't know what I can do about bringing it about. But I'm not afraid of politics. I really believe we should be anxiously engaged in making the world a better place. We live in the world, it's where we are, shouldn't hold back from the ways of the world.

S48 - (re college) - People should learn to express themselves, communicate, research, be objective. Those are its obligations and it's just not fulfilling them. It should be structured differently. The way things are structured there's a line of demarcation drawn between teacher and student. Many teachers have the misconception that they are the leader in the classroom, the ruler. Students think they have to be submissive and go along.

S03 - Some people are here for a definite goal [like himself] and maybe that takes away from what a university should be and do. Ideally for education you should want to learn. In a lot of ways it's easier somewhere else. If you want to learn don't go to university go to Europe, or sit in a library and teach yourself what you want to learn. The person's got to want to learn and if they do you can't stop them. Just if they have the interest and you can provide the facilities and nothing getting in the way. If I was controlling my own learning I'd do a lot more than in this structure.

S02 - You form values in life by trying things out and what feels good becomes engrained as a value. And if you like it it seems natural to want to share it with other people.

S21 - (re film making) - Oh, you can affect people a lot. I've got opinions on things and more than anything else you can affect people with movies.

'(and later)'

- Basically I'm politically inclined in my work. [I. ← In what way?] I always stress freedom. That's always there in my work, but it's never an overt statement. The principle point is to entertain people and that's the way I want it to be taken. But I really want power over people, be able to move them and make them think, and you can do that, really drive a point across.

S03 - I find it important sometimes to let people know I believe such and such. Just show that there's another way to look at it, if someone's not hearing the full side.

Concept of Self

The process of the differentiation of self continues in an extension and deepening of the capacities for self-awareness. The greater coherence and complexity of the cognitive structure means both that the psychological 'self' is viewed as a richer more complex system, and that it exists as a unit within a wider and more complex world. This results in the possibility of greater 'distance' from oneself. This is partly the awareness of a larger context; one can be an instance of a general rule, an individual occupying some role; that is, one is not only a person, separate from normative values, but a participant in a

social system of which the values are a part. This may involve a greater awareness of how one sees things relative to other people, and of the importance of other people's recognition of oneself (as well as the need to make independent decisions). This capacity for a more general self-definition, a 'placing' of oneself makes it more possible to talk of a specific conscious 'sense of identity' (as opposed to its felt consequences).

The increased capacity for self-examination and self-criticism with respect to one's value system also involves a more sophisticated system of psychological perspective on oneself. Self-reflection on experiences, needs, abilities is more common; self-criticism is better articulated; self-referential remarks may be more often attached to statements; there is further recognition of the limitations of one's world-view; and psychological comments made about one's preferences, views, and values.

[I. - So you feel you should strive to, achieve something?]
 S30 - Yeah. It's a problem 'cos it works into your decisions at times. I've always had that desire to achieve, go as far as I can, but at times I wish I didn't. If you can be satisfied with what you're doing. Like I can be satisfied with what I'm doing at times and thoughts will come into my mind that well I could be doing this and that would be more satisfying or be more demanding on myself.

S47 - I discovered that I could get into and out of things by bullshitting to people. That gave a very negative aspect to my personality. I tend to lay bullshit on people whenever I get uncomfortable.

[I. - What do you get from having those beliefs?]
 S03 - Dissatisfaction. In the sense that it's hard to find. People are human and all have ideals, but it's hard to live up to yourself. [I. - They're important to you?] I think they're important in the sense that they give me a sense of what I am for myself. [I. - How do you mean?] Like an ideal to live up to, or a base, say, to act upon, something to judge what I do against. It also greatly affects what I think of myself. If I have ideals and live up to them it affects what I think of myself. If you have high ideas and you're not acting in accordance with them it should make

you think about what you're doing. Which is good for me, good to be confronted with a problem.

S02 - (re a crisis in his relationship with his religious ideals) - You may think I rationalised but I really think I matured personally when I said 'this isn't the best way to go but I'm going to go honestly'. I really was at a point where I felt I was living double standards. I was respected in the church but was also living it up a bit. Got to the point where I thought that wasn't right, but what wasn't right was living the double standard. So I just stopped pretending.

S30 - I came to realise over the time I had money coming in that it was not the most satisfying thing, and began to realise people liked you because of the person you were and how you treated them, not for the things you had. I used to be very shy, and recognition in sports helped, made me feel better about myself, but I didn't want people to think of me merely as a Lacrosse player, so often I'd de-emphasise that and work on other aspects. It's all part of confirming your feelings of self-worth. You can feel that in yourself, but also you like to have it confirmed by other people - go 'oh, yeah', sort of checking off. Your accomplishment gets appreciated by other people.

Mode of Choice

The more active exploring and relating quality that seems to be present makes for an increased consciousness of an active decision making process about one's life. There may also be a clearer awareness of pressures from outside affecting this choice and an expressed desire to make one's own decision, 'something I wanted to do'. In this way commitment becomes more of an act one performs, since choices are related to values and self-worth is inverted in one's projects. There is a falling off in the theme of total involvement, more evidence of ongoing self-doubt, and an increase in provisional goal-setting, actively working to flexible plans. There is a greater consciousness of the possibility of getting it 'wrong'.

There is some indication of a fuller time perspective, perhaps more sense of being involved in an overall life pattern.

Certainly there is often the theme of self-improvement and self-development, of working on personal projects and fulfilling or living up to one's capabilities and potential. This growth is still often expressed in relatively intellectual terms of understanding and knowledge. There is characteristically a major preoccupation with one's sense of personal responsibility, for living up to the commitments one makes and the standards one sets, not wasting one's potential, and for one's involvement with other people, the sense of a social order, something bigger than oneself to which one makes a contribution. The weight of this responsibility can come to feel burdensome.

S30 - (re time taken out of college) - I took that time because I was unsure of what I wanted to go into. Wanted to make sense of my own decision. My parents wanted me to go back obviously but I didn't feel at that time I was prepared to go. I wanted to make it up on my own. I felt these pressures of the family to go back to school but I didn't want to be influenced, wanted it to be my own decision. It wouldn't be worthwhile to go back on somebody else's decision.

'(and later)'

- I like to feel I'm controlling my life and what I do, not just sort of following into the system or whatever. I think it's 'cos I've had choices available to me. I just don't like the idea of living up to somebody else's expectations. I think you should live up to your own values, your own ideas and direction.

S02 - There's a sort of linear thing in life that you continue developing. Something I admire is that someone wants to keep growing. If somebody is just happy staying where they are, satisfied with that but have no ambition for anything greater. You should have ambition and strive to fulfill it.

S37 - I sort of always get into these states where once I'm content I feel 'oh, I'm sort of slowing down', reach a level of contentment, and I take a big look around and I feel there's something lacking.

S02 - I have to make a decision of whether to remain in school and it controls someone else's life too. I would like to have some definite ideas to present to my wife. Again it's a sort of pressure from inside in that I want to

please, rather than that I'm pressured by her as an individual.

S17 - Commitment is responsibility sort of - having to take account of factors outside of your own personal existence, those play a large part in your decision making. But I hate to think of somebody forcing me into something in what I want to do in life.

S21 - I feel very responsible, overly responsible for people. I sometimes think I worry too much about other people's problems, sometimes wish I was the type of person that didn't give a damn about other people. I just feel it's my responsibility as a person to argue with some people, say that are being racially prejudiced, to argue and change his mind. Sometimes I think it would be great if I just felt the same way.

S03 - It's important to do certain things that give me a right to be in the classroom. It shouldn't be a job, should be something you really want to do, and you have an obligation to those people who have to sit there in front of you. They have to be there and you don't. You should make their time worthwhile.

Level IV - Autonomous Individualistic Identity

At this level a further major change in perspective taking ability results in a focus on the relativity and individuality of personal perspective itself. Rather than simply being a complex 'self' with a point of view, a system of values and ideas, in relation to other such selves, the person becomes aware of having such a 'self system' in the same way as others do, and that it is relative to the value systems and social role systems which they are involved with. The person at this level is coming to see himself in context as subject to a unique, constraining but contingent perspective that is himself, and his involvements.

Core Problem

The focal problem created by this development seems to be that of commitment itself. Just as the self system can be objectively considered so the act of commitment becomes the object of examination. Implicitly commitment is no longer something done by the self, chosen in relation to one's values, but is the creation of the self, is a new and emergent self. Thus the person is faced with choosing a personal identity; not what he is to do, or who he is to be recognised as, but who he is to be; he is searching for himself.

S06 - I assume that my life is valuable at least. Or I assume I've made that assumption. [I. - Come again?] The problem is I can't state that as a fact. But since I haven't killed myself, or zombied myself, I must have assumed that somewhere. When you get down to it everything is going to end up circular logic. There's no absolutes. If I knew what the value of human life is I'd be God. [I. - Where does that leave you?] It makes me a question mark. If my assumption is wrong my life has a different meaning. To someone not sharing the same assumptions my life must look entirely different.

[I. - Could I start off very generally by just asking you who you are?]

S44 - I'm just a black-head of space, secreted by pressures on the globe, suddenly an object, but I'm alive. Just part of the game of matter and energy. Just a participant in the game of life. To give you a cosmic answer. [I. - And what are you going to do?!] Have a happy day, some life affirming activity, and a good sleep. There's two different strategies you can adopt - minimise harm, avoid stress, plan the day so you don't push yourself too hard, fulfilling my own rhythms. But then again rhythms aren't things that just reveal themselves, I have to do constructive things too, work on them. So also I try and implant myself in life-affirming, money making, comfortable activities.

S49 - There are many things I feel I can't compromise on; but they're of a relative nature. More of a formula of non-compromise, rather than specific things I feel I can't do. Be true to myself, my spirit of life and to other people, deal with them on that same level, that they are more than a problem, or a conglomeration of activity. They're a person and that describes me too, and I feel I can't compromise that thing.

S36 - I used to have a very absolute kind of morality. Now whenever I think about things it's never in terms of themselves, they're always part of a larger something.

S49 - I like to keep in mind the fact that I'm going to die and that fact kind of encourages me to risk. I can't be comfortable sitting around on my butt, should be doing something as worthwhile as I can. That's part of my motivation for growing. Not that I'm afraid of death - anyone who says they've never confronted that, that I would believe myself, I'd be very surprised - just a sense of finiteness.

S49 - Not only can I not judge other people but I can't judge myself. I can be pleased with myself or something, react on a direct level - it's kind of an act of the ego to do it that way, not how I want to relate to the world. It's certainly a consideration that I have to be easy on myself:

S36 - Generally people should look in here - that gives you a greater sense of identity and self-awareness. People tend to see reflections of themselves in their car, clothes, job. You can make yourself think you're anything with that, so that people go all through their lives building up the layers of unreal identity. If no-one is in touch with what they really are how can they have respect for anyone else. I know I have more respect - I had little respect for others views and beliefs and I was negating them. I expect more respect from people now, and in turn treat them better.

S38 - Sometimes if I see a problem arising I try and look at it from a universal watching position. Look at the events that lead up to it and why it's happening, what's the solution. Generally it works. Not infallible, of course. I sometimes become really emotional and irrational. Then it becomes her role to say wait a minute, let's look at this.

S44 - I wasn't impressed by the need for a world-view till the last two or three years. Best if you just didn't think about it. Was asking 'why', going through an infinite regress, get to finally a 'because damn it'. I felt I was stopping short, and dismissed the issue. [I. - What questions were you asking?] What it was supposed to be like as a human being, what roles I was supposed to fit into, what moral position I was supposed to adopt. Those were like self-evident truths, right and wrong, the way to do things. Then I became more relativistic, not look for the bed-rock but bundle up reeds like in a swamp and let them float. I realised that people do a lot of constructing of the world. I was very self-confident, relativism hadn't really hit home, that I was no better. And I guess I felt like people were kind of stupid. Then I discovered I was not really hot shit. Became impressed with the problem of the unanswered questions, and that other people were doing my thinking for me, and my whole life was involved, depends

on assumptions, what life styles should be like. These seem to be very external, institutionalised, ideological messages not informed by immediate experience. Felt a need to work out some answer. Snap out of my dogmatic slumbers if I didn't want to be full of shit.

More explicitly twin problems emerge as conflicts from the sense of responsibility which is thematic at the previous level. One is the need for the individual to be responsible to the social order. The other is the need for the person to judge and justify himself with respect to a coherent system of values. In both areas a questioning of these demands appears, and possibly a reaction against them, in an assertion of one's individuality.

In the social sphere (which may initially be the dominant issue) there is a move away, thematically, from the ideas of helping other people, and influencing and changing society. Suspicion may be expressed of those so concerned. There is a preoccupation with the compromises of oneself risked by such involvement, doubt about peoples' motivations, and awareness of the contradiction of prizing individuality and autonomy and the desire to influence people to create a different order. People may still have strong ideological inclinations but these may be hidden by an uninvolved stance. There may be a strong awareness of social issues, and one's own situation put in the context of an undesirable and unpredictable social order, but political involvement is generally rejected as self-seeking or unrealistic. Society tends to be viewed individualistically as the product of the actions of its members. It may be held to require foregoing negative actions but having less right to make positive claims. This individualism may be expressed sometimes as strong feelings of alienation, and a sense of being

oppressed by social role demands.

(S14 voices these concerns with much transitional level conflict and doubt.)

S14 - I just feel that people should be doing something. Work can be fulfilling if you think it's fulfilling. Something fulfilling is just doing something, fulfilling an obligation. [I. - What does that involve?] Everybody has a role to play in society I guess, it involves doing something. But then again I usually resist that pressure. I can see that pressure and it works on me and I feel guilty about not fulfilling that but at the same time I feel good that I'm not, not just blindly doing that because of outside pressure. Then again the pressure comes from within too. But the pressure from within me to fulfill that obligation, you have an obligation to yourself too. In some ways it would make me feel good to have a full time job and work hard and make my contribution and pay taxes. In other ways it would make me feel bad. [I. - How would it feel good?] I would have the feeling of contributing something, of being a part of something, something bigger than just myself. It wouldn't be self-centred, I'd be doing things for the good of other people even working in a grocery store, I'd be part of the whole functioning of society, part of the whole. Those same things are quite frightening to me also - why should I do things just for the good of the whole, why try to be part of something, why not just try to be an individual? Plus the idea of spending forty years at something, the rest of my life, seeing it go on and on.

'(and later)'

- How do you resolve the conflict between the individual and the group? [I. - Sounds like a central conflict for you.] Yeah, I think that's it, that's the central conflict. I think that's the basis of everything - politics, economics, philosophy - the individual in relation to the group and how to resolve it. If you knew that - secret of the universe!

S13 - I always saw myself with a future, as something, had a goal in mind, not smoking dope all day. Not becoming an engineer [an earlier career goal] had more to do with wanting to do something good for people, to help people. Don't feel that way any more. Don't think people want to be helped a lot of the time. The idea of doing that isn't there with me any more. The social work mentality doesn't work. I can offer support, sympathise, listen but can I help you? If that's a help it's cool and I'm willing to do it. I still think that's important and I'm willing to listen to pretty much anything anybody tells me. But to actively go out and search people out and say I want to help - I don't want that for me and don't know anybody who does want that. It's putting your values on the other person, you're trying to change them to something. In helping them you believe they're not where they want to be,

or they're not where you want them to be. It's very possible they don't want to be where you want them to be. It may be very harmful.

'(and later)'

- Part of the idea of wanting other people to have the same values as I did, not being able to fulfill them, and I'd present alternatives and they'd jump to it. But the kids didn't and I was really frustrated. It was an idea that the whole burden of the world rested on my particular shoulders, and I had to solve the problems. Don't feel that way now.

S07 - I don't think you'd contribute to anyone else's life unless it came back to you in some way. Think everybody looks at things like that whether they'd admit it or not.

S36 - As a general statement I could say I used to be concerned with what's happening out there and my concern has become more and more internalised. Used to feel really powerless - one small me against the whole thing. Then I began to turn inwards and came to the realisation or belief if I could just change me then that would be one of the biggest things, it would be important in what was happening around me. Used to feel what a pawn of the capitalist system I was, I was part of it and there was nothing I could do - really powerless. But as I became concentrated on me as an individual, then well throwing away my credit card became a really important, a really powerful gesture, where I didn't think I could do anything before.

S07 - I've tried to avoid politics, it doesn't concern me. I'm willing to take whatever there is and make the best of it. As far as idealism goes I'm not an idealist in any sense of the word. A lot of people who feel really strongly about politics are deluding themselves. If only this, this, and this, we'd be living in paradise. I think that's ridiculous.

S08 - Yeah, it's going to sound trite but I'd sooner not be involved. My political stance is keep the hell away from me. I frankly don't give enough of a shit about my society to be overly concerned with who's running it. I don't see any difference between parties, any of those clowns. [I. - So you're just not interested?] It's not a lack of interest, it's a conscious denial of politics. My attitude is always one of resignation. What I think the attitude necessary to change things is, is not going to be accepted by enough people to make for any movement. Most people are so indoctrinated that they don't see anything wrong with it. Apathy is the password of the day and I'm apathetic too.

'(and later)'

- This sounds really simple minded, and it is, but if everybody would just leave each other alone and quit trying to lay trips on each other then things would just be happy.

And that's where I'm at. I try not to lay trips on other people and I'd as soon they didn't do it to me.

'(and later)'

- Democracy is not where it's at. [I. - What is?] Socialism. [I. - That's more definite than earlier.] Yeah well at that point I was trying not to lay my trips down. [I. - You're a socialist?] I see that as an apparently ideal state - the workers owning the means of production instead of selling their labour, yeah.

S13 - I've separated the two now, I'm important and society is important. I've excluded society. I don't see that the two have to clash. There's things to do for me and things to do for society. If they clash we have to do something, but I've turned the focal point from society to myself.

S44 - I want to be an interdependent person - that's the challenge to face up to and do it your way and not rely so much on the impersonal, ordered, legal, mechanical, de-humanising, life-denying system. I don't want to be stupid - if I don't think about these things I'm stupid. My general political standpoint is Utopian - as little intervention of government in people's lives as possible.

Associated Values

As the system of concepts and ideals for interpreting and evaluating the self becomes an object of attention people seem to be faced with the task of choosing and affirming an entire context of meaning in order to validate themselves. This is both a move away from the oppressive demand to justify oneself, and also may feel like an impossible task, the 'existential' problem of creating a meaning for life. Choosing an identity is a creative act, a personal project. All identities may potentially be viewed as the product of social consensus, or as 'game playing', as entirely personal or arbitrary ('absurd', in the existentialist phrase). Thus it may feel like there are few, or no fixed points in a complex and uncertain world, and ideals may be seen as a misguided and illusory or self-deceptive

means of reassuring oneself.

This would be the extreme conclusion of this process of self-questioning. More commonly there is a real involvement with an effort to give some meaning to one's involvement and to find 'projects' that affirm a validity for oneself. Thus it is not jobs or careers that tend to be important here but where one is in one's life, what the personal meaning of a job is, a personal quest to discover what one is about, and who one is. Thus, there is considerable consistency and interrelation between different areas in the individual's life, the areas of enquiry mesh together (and frequently the structure of the identity interview may have to be treated very flexibly). People's concerns in this are often developed quite ideologically and philosophically. There is frequently an over-intellectualised quality to their explorations. They may be involved with, or have flirted with voguish philosophical systems. The assertion of individuality may also be expressed in terms of a denial of any such systems of meaning in favour of a more hedonistic self-assertive relativism which rejects 'moralistic' demands for self-justification (though this may seem to lack coherence and be mixed with elements of idealism, or desires to contribute something).

S06 - I never do anything that doesn't interest me. [I. - What does?] Has to be exercising - if I've done it before and know I can do it then it doesn't interest me. It gets boring doing something over and over again. [I. - Yes, but why does it seem so important to you?] You want to get right down to my values in life! [I. - Mm, perhaps.] When you get down through the arguments to the nitty gritty you either have to put a value on human life or you don't - using your life to do something a machine could do is a waste. If I didn't make that assumption I'd commit suicide. That's what everything comes down to.

S08 - It bothers me at times but usually not that concerned about it. I don't think it's necessarily important that I find a career and do that for the rest of my life, just don't think it's that important. Just happy at the time just living. [I. - Yeah, what is important to you?]
 Enjoying myself, hedonistic essentially, yes. Well the important things to me are other people. [I. - How do you mean?] I guess I mean that I don't feel it necessary to become a, quotes, productive member of society. I'd rather just go through life meeting new people and getting to like them and hopefully having them like me, understanding them a bit and learning about things. I see a career as something that would confine me. It keeps you in one orientation, focussed on one thing. I'm not sure enough about what I'd want to do to do that.

'(and later)'

- Friends are good for cosmic unity. [I. - What on earth does that mean?] Really don't know. Some vague reference to the oneness of it all, creation, vague notions, as being my philosophical doctrine, bastardised from various things. In the long run it all comes back to yourself. Friends are good for you, your ego, hedonist.

[I. - What do you see for the future?]

S06 - Nuclear holocaust, germ warfare - it reinforces my looking for immediate gratification. Things could be great, enough resources to have everybody clothed, fed, educated. People shouldn't have to work. I can cut most of that off, but others have to bear the brunt. My world would have everybody trying to explore different meanings as part of their life. Any world that I can be intensely joyously alive in.

S01 - My life isn't broken up into family, occupation etc. It's just sort of this underlying sense of what I have to do even though that's manifested in very vague ways sometimes it's nevertheless there. That's nice to have. Even though you don't know where you're going sometimes you can say, hey you know where you're going really, no great hassle! I feel like I'm going in a certain direction now, different from my studies. Some sort of development that's apart from what I do in the world seems to be growing inside myself. It takes orders from me - well it sort of is me, an unconscious progression. You don't ignore questions of your identity, just that they don't matter to you any more. If you start questioning why am I doing this, it just cuts your wheels right out. To have something you're interested in gives you a purpose for living that doesn't depend on the whole cosmology of the universe. You need that - anyone can just survive.

S07 - As far as going for anything I'd like to make some sort of contribution. Don't think that's necessary, doesn't make much difference, but I probably will anyway, just 'cos it's an interesting game to play, the 'make a contribution'

game, 'cos keeps you busy, alleviates boredom. That's one of the best things to avoid, as long as you keep doing things that make a difference to you at the moment. Can look at it in the broader context of it, it doesn't mean anything at all, but make it mean 'cos if I don't I'll be bored.

S44 - Originally I was kept from being lured to this type of work [being a college teaching assistant] by feeling that it was not contributing anything, being parasitical, not suffering like my counterparts and family. They usually boast of pain in life, they really celebrate pain in itself. A T.A. is a hedonistic job. Been able to dismiss that and I've dismissed the eight hour day, so I've legitimated my relatively hedonistic life-style. That's getting rid of the bad stuff. Positively I've been impressed with the importance of accounting for ourselves as people in the world, the social world, the importance of reflecting on life. Before I thought it was a luxury, now I think it's essential. Without it you'll end up being conned, end up living a stupid life-style.

'(and later)'

- Your occupation is choosing a life-style. Ideally I would like work not to be demarcated from play, from the rest of my life, at least not clearly. But I can't help it because most work you don't want in your head the rest of the time. I'd just like a job that I have pleasure in thinking about.

S38 - (re his parents) - I don't know what their concept of what makes the world go round is, what they believe in, what they take comfort in. You have to justify what you're doing to yourself in order to be happy. I don't know how they do that. [I. - And you?] How do I justify what I'm doing? I'm having a good time. As far as I'm concerned that's the only important thing right now.

Structure of Belief

A new relationship to the construction of knowledge is also implied by this. There is often considerable intellectual reflection, which may be of great personal importance, but which can be very philosophical and 'over-intellectualised'. There may be a strong need to understand; possibly a sense of an intellectual quest. But there may also be considerable ambivalence about this, a sense of irrelevance or unreality about the college experience, a need to get 'into life'. The world may be

seen as a system too complex and contradictory to predict, our understanding limited. This can be problematic for the sense of coherence, and involve feelings of fragmentation. There may be a yearning for a lost simplicity. Epistemologically this may be expressed in terms of the close relationship between knowledge and practice, a transactional view of concepts being constructed and altered in their interplay with testing through experience. The openness of belief systems and their provisional character may be stressed.

Thinking seems more complex, with the appreciation of the existence of conceptual paradox, possibly a delight in the contradictory. Thinking may be described sometimes as being dialectical, seeing things in terms of the changing tensional relationship of opposites. There is a capacity for contextual thinking - examining the assumptions underlying propositions and seeing them as dependent on some conceptual system, viewing such systems in a broader context. The style of expression may sometimes express reservations or qualifications. This implies a similar perspective on one's own thinking as contextually based. This contextual questioning together with the sense of the constructed provisional nature of knowledge can result in serious problems in the validation of meaning, referred to earlier, and be the basis of a radical self-doubt or scepticism: meaning is arbitrary, truth merely consensual, value relative and personal. There is no basis from which to judge others, or reciprocally for one to be called to justify oneself. In less undermining forms this makes for a deepened respect and appreciation for the uniqueness of others' perspectives, for the individuality of any point of view. The relativistic view

does not usually seem entirely consistent, and may contain ideological and moralistic overtones.

S06 - If I find I'm happy operating in a certain mode of existing and my beliefs don't mesh with that then I'll just readjust my beliefs accordingly. A very flexible belief system. One of my basic tenets - no absolutes. You can change on the fly and not for any particular reason either 'cos that makes that into an absolute.

S08 - Maybe there is some meaning to our being here. I don't think there is. [I. - Even though there is the 'power' you talked about?] Don't think it's in control and creating meanings for all us important human beings on earth. Just something that created it all and my mind can't comprehend concepts on that level. I restrict my focus to more trivial everyday topics.

S01 - You have to learn to accept what is there without having to have a rational justification. In the effort to try to answer questions that have no answers though, it's an exercise that improves yourself. I don't know why I feel that.

S08 - We're all so concerned that there's meaning to existence and we have to give it meaning if there isn't. People get frightened when there's no meaning in life and they give it meaning by accepting what somebody tells them is the way things are. Perhaps there's another way - I hope so. But I'm not going to let my desire for that cause me to accept some proposition from some fool in a turban telling me that's the way reality is. And that's what I'm afraid of, that I'm going to get desperate enough to do that, latch onto something.

S08 - The ways to get around it [the problem communicating with people authentically] - meditation, L.S.D., Ram Das, Kung Fu, the usual ways - none of them seemed like anything but convincing yourself something was so and working from there. Just a constructed reality, no more valid than any reality I could construct.

'(and later)'

- Here's a reality and here's a reality and here's a reality
- they all make up the totality of my one reality, but each one makes up a different reality within which I can work.

S08 - (re lectures) - I just see it as where that particular professor is at; he's limited to seeing it that way and most professors I don't have a lot of respect for. I'm willing to listen because it's partially true and it's my job to take these parts and work it into my ultimate truth which is no more or less valid than theirs. I'm accepting it on the same grounds they are, it makes them comfortable. I don't believe in ultimate truth; truth is relative, what makes you com-

fortable. [I. - So truth is personal. How do you arrive at it?] All anybody has, you empirically validate it (laughs), that's essentially what you do. How does it work for you in day to day activities, how does it jibe with where you're at and where you're going. It's all relative, depends on your frame of mind and what's going on in your life at the time.

S05 - I see myself do this a lot - question what people say. When you really come right down to it it's very vague unless you have a context. There are a lot of questions that don't make too much sense when you try to answer them. That's maybe because we make so many assumptions when we ask them. Like that they can be answered.

S01 - My ideas are part of me, those things I can't back down upon, not just opinions, but what I think I'm doing here. And they may expand, but not change much. In the end it's impossible for anyone to threaten your ideas because they have no basis to form an attack. They can't be attacked on a rational basis. I feel too rational and that puts a damper on what I do in many areas. But my choice to go into languages is a kind of faith.

S43 - What I perceive as being true somebody else might perceive as B.S. they're right as much as I am, that's how they perceive it. You really can't say one is true and one isn't. Part of it is socially defined and part is individually defined - they don't necessarily coincide. [I. - Aren't there some standards?] There are certain standards within societally acceptable frameworks. I consider myself to be right, I set myself up in a position of doing that, but I'm at least able to accept standards or deviations from what I think. There are standards to determine but they can be wide, the range that truth can take can be wide, opposite truths can still be acceptable. It really bothered me when I first began to realise my truth wasn't the only one. It started when I was beginning to do things for myself, the process of defining who I was, seeing I could change too. There's a different truth now and everyone has their own truth and mine is one of them.

S07 - Thought it was possible once you'd found out the way things were you could make everybody believe it. For any given statement it was either true or false, and you should be able to convince everybody and go on from there. Now I'm in a freer position, sort of liberating. I can accept the way people think better. It used to bug me, how could they see it that way. I was at school to pick out things that made them wrong. I see more now where people are coming from - it's not bad, it's just where they're coming from.

S07 - (re religion) - It's a big thing in giving meaning to life. Well there's no intrinsic meaning, ultimately life is meaningless. That's where religious belief has got it wrong, they think they matter to someone else, God or whatever, where they're really so insignificant. Any meaning there is

you put into it yourself - just try to create meaning, create little games for yourself to play. Search for happiness, that's the most important thing.

[I. - Understanding seems important to you.]

S07 - Oh, yeah, very - it's been my whole life. That's another basic value I guess. Always been asking questions and never been satisfied with the answers. Life has been trying to fit it all together in some kind of coherent system of understanding the universe on all its different levels.

S44 - Meaning is something that arises from my activities, it's a process. Not asking for someone to give me meaning. Not any meaning will do 'cos I'm experimenting with meanings all the time. Like in my life the meaning of doing things for God was given to me but I rejected it, it didn't account for what was going on, and it didn't satisfy me as a good carrot to have.

S44 - I've been more impressed with a paradox of my participation in the world, that I influence the collective consciousness of my society in a very minute manner and that it influences me - a circular process that is always going on. A transactional process. It's not a paradox - only if you freeze the frame like a movie. Drag your foot in the water and the raft will go where you want.

S49 - For myself Bahai is just a name for the relation with myself and the Supreme if you like. Like Coca-Cola it's a name, a description of something it doesn't contain, a symbol. But it's important that it be considered that. What happens people confuse the glass with the water. The container is important too but it's not the reality.

[I. - In what way is the container important?] The container is important in that the matrix should fit the being using it. Man as he changes, his potential changes, and so the container changes.

Concept of Self

This new level of perspective involves a further transformation in the sense of self. It is perspective on the self as a complex system developed at the previous level; it is now seen in the context of other systems, both of other such selves, and of contexts of cultural meaning, and social role. The result is a sense of the individuality and uniqueness, but also the relativity and constrainedness of the self. One sees that one

has a point of view and a place in the world, as others do, and one's sense of identity is no longer constituted by where one is or who one is in the world, nor by the system of values and roles by which one lives, but by everything that constitutes one's individual uniqueness by one's entire experience and world-view', by how one sees oneself and the world. As discussed above this presents the person potentially with a classic 'existential dilemma', great problems in validating himself, his own foundations placed in question, and asking 'what it's all about'.

This development is experienced as a self-assertion, of one's individuality over the constraints of society and of one's potential over the 'superego-ish' quality of the demands and responsibilities of a system of values. It may be felt as a breaking through personal barriers or out of constraints. One's identity may be asserted as valid over and beyond a need for justification; one is worthwhile by virtue of one's own existence. There may be an emphasis on justifiable 'selfishness', or hedonism. One may proclaim that one is content to simply 'drift' in life rather than be constrained by definite commitments. Thus there may be a sense of liberation, of the freeing of the self and the opening up of new possibilities, which may feel infinite. But on the other hand there is a potential vacuum that is being moved into, with the possibility of great anxiety and agonising uncertainty. There is considerable scope for feelings of alienation both from a sense of community with others, of having any real common ground, and from any secure grounding for personal validation from one's own system of personal meanings.

S13 - Engineering looks more acceptable now because I've

redefined my goals to more something to help me, to make me comfortable in life, something I'd like to do rather than always thinking of helping other people. Which was what it was with teaching. There was all these problems with kids and I could do my part to make the world better. I still feel I can do my part to make it better but in ways I can do, ways I'm good at. Maybe by making me feel good about myself I can make the world better. I don't know. It's not my primary goal anymore. I guess I'm becoming more ego-centric, I'm more interested in myself and what I'd like to do. [I. - What is your primary goal?] To satisfy myself, to make me feel worthwhile. In doing that I wouldn't be able to go around ripping people off. Before I was willing to sacrifice and go out of my way. I'm not willing to do that any more. [I. - What made you change?] Not sure. The awareness of me as a person more than anything else. I'm an individual, I have my needs too and I should try to fulfill them as an end. If that's all I can do that's an accomplishment.

S38 - Now I can look at it more objectively, I don't feel I have to have a definite goal or a motive to do what I do. [I. - Before you wanted to find a life goal?] I felt I had to justify what I was doing and why I wanted to do what I wanted to do.

S06 - (re the basis of his beliefs) - I don't know it's right. It's an article of faith. You can't justify faith. It makes it easy for me to live, I guess. Maybe that's a justification but it doesn't say it's 'right', not proving it. It's self-justifying. It's a paradox. Something that can be made to prove anything proves nothing.

S06 - If I went around trying to live up to the expectations of every joker in the world I'd be old and grey before too long. I won't make any major change in my life for someone else.

S29 - Are you going to be stuck doing the same job you don't like for pure survival, going along with the group, other powers dictating exactly what your path is going to be. For example society chooses how many doctors, lawyers, psychologists there's going to be. So am I going to say the choice is there, this is it, take it or on the other hand am I going to act my own road. That's what I'm here for, not so much the degree, but knowledge that I can mould into whatever you want it to be, you know. This is the reason I'm here, I chose to act my own road.

Mode of Choice

The sense of liberation and the opening of possibilities creates feeling of having greater choice and control over what

one can be. If one's 'self' is a construct which is available for examination then one may have the sense that one can choose who one will be. One creates, and is potentially responsible for, one's whole experience of the world. Again this is paradoxical since there is simultaneously a greater awareness of chance and the arbitrariness of life.

Thus there may be a strong ambivalence focussed around the issue of commitment. On the one hand there is a desire to explore many possibilities and maintain one's options open. The importance of movement and change may be emphasised, and commitment seen as tedious and oppressive. On the other hand there may be a strong wish to find some direction, and there may be an urge to act, simply to do something, no matter what, and a disparagement of indecision. In this way the hope is to create some identity by an act of commitment, with the act of decision being fulfilling itself. This is clearly difficult and people may vacillate considerably. Alternatively intellectualised defensive postures may be adopted to control the anxiety. A stance of non-involvement may be taken. Thus 'relativism' is both an assertion of self and a stance for coping with the problems of cohesion it creates; it can be a pseudo-openness.

S38 - I was busy chasing around with my idea of what life was all about. [I. - What was that?] Skiing. [I. - What did that mean to you?] I didn't know. I avoided thinking about it, it was a depressing thought - God, what am I going to do, what is life all about - scary. And it was O.K. if I was totally preoccupied with something else. Later it's not so scary. Everybody else is in the same boat. They don't know what life was all about either but they don't seem to worry about it so why should I.

S08 - Thought we'd get down to removing oneself from life, just watching it instead of being part of it. [I. - You feel that?] I don't know what it means to be part of life. I feel I'm just observing a lot of the time from outside. I don't deny people react and respond to me but I do feel

I'm just watching. Being prepared to involve myself in the ritualistic communication games we play and I'm prepared not to deny those have meaning and value. Switched from one reality to another. When I'm playing I'm happy where I am. When I'm looking I'm not happy where I am, I'm searching, looking for alternatives. It's a form of self-inflicted pain if you like. Maybe that's the crux on which my belief system totters. It's a matter of keeping yourself detached until you find what you want to, or throw yourself into everything that comes along until you find what you want to. And you're tottering on that. I'm on the detached side but it's uncomfortable.

'(and later)'

- Not getting involved is lonely, but it's rewarding too, but it might not be as rewarding when you're older. I think the product of non-involvement in cynicism which is a trap I've been trying to avoid. [I. - Why is it a trap?] Just another constructed reality, anti-reality, no more or less valid, but less pleasant. Can't help getting cynical about all the little games happening if you stand back and watch. To thine own self be true, eh!

S05 - I've had a history of not making choices for myself. I've found direction in the sense that I know what I want, I want to find directions.

S07 - That's the whole point, that you create the whole show yourself and if you make it a bad experience you're totally responsible. It's nothing to do with them.

S38 - I sometimes envy people who have a definite idea of what's going on, a definite philosophy, an outlook on life. I don't always agree but I can envy their having it. But I can live without it for now.

S06 - I don't like to think it but it's probably true that my cultural and personality matrix excludes some things. It's sufficiently fixed that there are some things not that I couldn't do but that I couldn't consider. [I. - And that bothers you?] Bothers me because if you want my purpose in life it's to maximise my degrees of freedom, if I have a choice between two situations. It's disappointing that whatever you do you're shutting off degrees of freedom just by being alive. Doesn't seem to be too much you can do about it.

[I. - Does it bother you that element of drift?]

S06 -- No, I find it almost sustaining. I've almost decided ... well, mostly I operate on the assumption there's no absolute meaning to life - that is reinforcing to that that I drift. It's made me happy so maybe life doesn't have to have true meaning. If I'm in a different mood it's kind of a piss off.

S06 - On some level it scares me to be known too well. It's

a trapped feeling. That's related to my tendency to see things as power situations. I don't like being labelled. Like the difference between 'X' is a programmer, and 'X' can program. I'm not a programmer, I'm me and I can program. [I. - What is it you feel about that?] A power thing. And feeling I've hit stasis, needing to not be fixed. And generally feeling do I really want to do this? It's a large question which I haven't resolved yet. Don't know if it should bother me.

S08 - I was struggling with my identity here. I didn't know who I was here and so I couldn't relate to people as who I was. I'd always run back home, where I knew who I was in those peoples' eyes and people knew me. Knew what was expected of me, a very safe environment. Then I realised it was me, I was alienating myself. I realised the onus was on me.

S05 - Don't want to put myself in a restrictive situation in which I can't expand and have freedom to do what I want, what I choose to do in life. That puts a limit on the kinds of sacrifices I'm willing to make, which is good and bad. It probably means I won't achieve what I want by the very fact that I won't want to go to the very sacrifices necessary to achieve that end.

[I. - What did you mean by self-actualisation?]

S07 - More of a feeling that you're there. Taking on more of a distinct identity than I have. I consider myself as being made up of bits and pieces, trying to get it all together into more of a feeling of completeness.

'(and later)'

- Getting rid of all the undecidedness, have to narrow myself down a bit. Indecision prevents me from doing that. I think now I should just have picked something and done it, taken a direction or a stand or something, rather than just looking at all the possibilities and not deciding which one and doing nothing. I lost myself in doing that, my sense of self faded away by going into such diverse areas. Now piecing it together my sense of myself is coming back again.

S06 - If I fitted the societal norm I would catch less flack. If I had a job, a house, a family, life would be clearly defined and simplistic and in some ways that's attractive, but only if you could have never thought about it beforehand, never know the difference. But it's a little too late. I wouldn't be satisfied. I've been exposed to a higher level of stimulation, environmental and intellectual.

S14 - Be a good feeling to resolve the conflict, especially if I could just make the choice, not worry about the options that I've left. Be a very secure feeling. I'd know where I was in relation to other people. I wish it was just possible to make the choice and blank out everything else. Make the choice and go on with it without second thoughts.

S13 - I feel married more and more but it's not right for either of us to make a commitment, ridiculous. What the hell do I know what I'm going to be like in twenty years, in five years, tomorrow. She's the same. I don't think it's fair. Future promises are in a sense wrong because you can't know.

A more complex and articulated view of oneself also develops. Self-referential qualifications to statements are more common, and there may be references to the ongoing interpersonal process of the interview. There is a deeper psychological insight into oneself: motivations are considered, as is the influence of background, and one's defensive tendencies to avoid issues. There may be reference to understanding oneself by getting in touch with one's feelings. This stage may be the paradigmatic one from involvement with therapeutic growth experiences. Personal growth may be used as an ideological basis around which to form some commitments. There may be a sense of wishing to discover one's 'real self'. This is related to a heightened awareness of social interaction. Some people may be very aware of trans-situational changes in their behaviour, or of oneself or others 'wearing masks', putting on motivated performances. Thus individuals are found with problems of self-integration as a quite explicit problem. Commitment may be experienced as a bringing together of disparate parts of oneself allowing a sense of individuated completeness.

There is a trend to a changed time perspective. While before future orientation seemed to be becoming better elaborated, now it is commonly dismissed as unimportant. There is relatively little orientation to the future, and a lack of an overall plan. What is vital is to be involved as much as possible in the present, to be doing all one can now. Thus rather than

trying to achieve a predetermined goal one should concentrate fully on 'now', the moment. While this can seem to represent a rejection of the demand to be in control of one's directions, it can also be seen as a feeling of greater security about the validity of one's individual personal response to a situation.

This is an important development because together with the open-ended transactional view of knowledge, and a sense of the importance of individual change and continuing development this relatively immediate time focus forms a general emphasis on process, of means rather than ends which seems to provide some people with a resolution to the ambivalences about commitment which in many of these subjects has a transitional quality, although it is the highest in this scheme.

S01 - I've always felt I had an identity in me, just had to bare the real me. With growth there's a gradual discarding of unreal possibilities in favour of one you really are. It becomes consistent but it also grows, I'm not sure, your inner self becomes dominant over the environment.

S36 - I became really dissatisfied with what I was doing. Maybe she [girl-friend] was the spark that ignited something. It was brought home to me that I was really out of touch with my emotions, I was pseudo-intellectual, like really rational. And I also became dissatisfied with my life up here; when I looked at it it was nothing. I was taking all these classes but wasn't really in touch with anything outside of the classroom. Saw that happening to a lot of people. When everything around became clear, suddenly myself became really clear to me. That was all bullshit, suddenly went poof. I feel dumb saying this, it seems like a cliché, but I realised the basic me, the core me at that time was a little boy needing someone to hug him and I thought is that all you are, is all this stuff really unimportant. I knew I couldn't know everything there was to know and didn't know everything about myself but yet I felt all the questions I'd ever wanted answered, the thing that had been driving me in that process from high school to now was suddenly gone. I've never felt so self-aware - that was really frightening at first.

S08 - I feel on the defensive. [I. - Why is that?] Because I am looking for something and wondering what, but should I keep that hidden etc. I feel this way in any situation to a certain extent. People are trying to find out where the

other person is at and what they're doing. So on some level with any kind of interaction with another human being there's going to be a mask happening. It's just more obvious in this case because it's a regular routine I had to slip into before [to his father]. Usually I wouldn't be able to say that was a mask and I wasn't being myself, because I'd be sure I was. [I. - How do you mean be yourself or not yourself?] Well like in this case I saw the routine and because I feel easy enough I was able to bring it to your attention, able to comment on myself, which is a way of exposing yourself, right? Now in most situations you don't have that confidence with someone else so you don't, or I didn't, look in at myself and comment - I might just let the mask happen. I become a part of it. So I guess it's not saying it's a mask, it's me at that time. But it's still a mask, goddammit. It's like it's a projection of just part of me, that part I've decided that person wants to see, whereas the rest of me maybe isn't hiding behind but it's not being projected as well. 'Mask' implies conscious hiding of part of you, I don't like it for that reason, but it's definitely showing somebody only a part.

'(and later)'

- I don't want to get caught up in peeking in on myself and verbalising my motives as I go along. It's fun to do but a waste of time. My slightly neurotic routine.

'(and later)'

- To take my thinking further at this point would mean I'd have to start examining my personal life. I'm not sure I'm capable of doing that objectively. [I. - Why would that be necessary?] Well the question I've come up with and gone around in four different ways since we started talking is why have people such a hard time communicating. I've come up with various reasons. If I'm going to pursue that I'd have to find out why I do that - construct various realities, project only a part of me.

[I. - How important are personal relationships to you?]
S49 - I try to put myself as much as I can into each exchange - don't get performance oriented on me here!

S36 - I don't think I'm trying to impress a lot of young minds, trying to put my mark on them. I don't think so - but who knows what evil lurks in the hearts of men!

S06 - To conceptualise it, I can't work, everything I do is a hobby. I happen to do things for hobbies that bring money in.

[I. - Got any plans?] S06 - Yeah, I plan to be happy.
[I. - Kind of vague.] Yeah, but it does maximise my degrees of freedom! I plan to screw around till I find something that makes me ultimately happy and I doubt I'll ever finish the plan.

S08 - I won't make plans. Always seems like just when I'm down and out, ready to end this little dance I'm doing on earth something pops up, or I pop something up; something I'm willing to get into for a while. Seems like things usually work out.

S01 - As I make a decision the present becomes the future. I'm more bound up with the present. What I'm doing in the future is what I'm doing now. No reason to separate the two.

S13 - Society sets up all sorts of pressure to do something. People operate on the grounds that things are going to get better and that's the reason for doing anything at all, but I don't think anything is going to get better. If you set the game up so that some are better than others and work out a plan, once you get there you realise it isn't really any better, then you have something else in the future to look forward to. [I. - And yet you've said that goals are everything.] Without goals it would be meaningless but goals themselves are nothing that great - it just has to happen.

S07 - I've no Utopian ideals - you shouldn't make your happiness contingent on goals that you set. You never know how it's going to turn out if you do this and this - too many links in the causal chain that have to be taken into account to predict what's going to happen. All you can do is guess a bit at it and aim yourself in a direction that this is going to be alright, but you can never know.

S49 - I'm basically a person and trying to become more of that. [I. - What do you mean by that?] I'm trying to find out what that really means without all the negative conditioning that I find in myself, responses that have been conditioned within myself that I feel are negative, are inappropriate because they conflict, with other parts of myself and I go 'what's happening'. So trying to deal with that. I guess it's a process. I feel like a process, not, ah, whatever the alternative is (laughs). [I. - What would it be?] To view yourself as complete and to be complacent with that, to deal with that as an absolute, think I'm me and everything else revolves around without touching me. Or to assume that because you're the way you are that makes it right. Everything is an onward process. There are no ends, only means.

Discussion of the Levels of Identity Structure

It was noted in the introduction to these descriptions that they were necessarily idealised. It is not suggested that

all subjects are immediately recognisable as conforming to the descriptions as they have been given. The divisions between the levels have been highlighted, the major thematic elements will not all be present simultaneously, and the influence of culture and psychodynamics are very salient in how subjects present their identity concerns.

The essential features of the scheme are presented in table 18. This summary may make it easier to appreciate the key features of each level and the developmental hierarchy implicit in the scheme as a whole. At the 'normative conventional' level the person is 'embedded' in a normative interpersonal world and his identity is defined in terms of location in that world. His identity task is to locate himself within it in a status which is attainable and validating in terms of mutually accepted values. At the level of 'emergent self-awareness' a perspective is being gained on that world. A self which is the 'possessor' of values, beliefs and interpersonal qualities is separated out from the interpersonal world and can be compared with aspects of it; formerly self-evident qualities of the normative world can be called into question. The identity task is to discover a location for the self which will be validating and fulfilling in terms of its perceived qualities. Commitment is the experience of a fit between the attributes of self and its location. At the 'systematic self-aware' level this sense of a conscious self is consolidated. The identity task is to create a coherent system of values, standards and beliefs that constitute a matrix for understanding and evaluating the self; and to find a location in the world which will preserve the integrity of this new self-

TABLE 18 - THE MAIN FEATURES OF 'IDENTITY STRUCTURE'

	Concept of Self	Core Problem	Associated Values	Structure of Belief System	Mode of Choice
I	Normative Conventional Identity	Knowing ones place, and getting to it ('making it').	Success in terms of normative values; living up to expectations.	Categories and locations in the interpersonal world, connected linearly and arranged hierarchically.	Identification with sub-group values, often mediated or supported by particular individuals.
II	Emergent Self-Aware Identity	Finding the place that is right for oneself.	Self-fulfillment, broadening of oneself, and giving of oneself.	Loosened categories related by dimensions of value; balancing difference.	Matching of self to locations in terms of values and qualities; looking for a 'fit'.
III	Systematic Self-Aware Identity	Working out a coherent stance that justifies ones activity and validates ones beliefs.	Self-respect in terms of ones standards, worth- while activity, responsibility.	Systematic structures of role-relations and values.	Exploration and debate of complex issues in search of coherence.
IV	Autonomous Individualistic Identity	Creating, or realising oneself as an individual through acts of commitment.	Individuality, uniqueness, authenticity, autonomy, being true to oneself.	Examination of underlying assumptions; transactional dialectical con- ceptions; proces- sual creation of meaning.	Ambivalence over maintaining open options and making arbitrary act of commitment; emergent sense of present cen- tered individuality.

system, one's self-respect, by validating it. There is an interaction of mutual criticism between the self-system and the social-system. In moving to the 'autonomous individualistic' level this systematic self-awareness is again re-contextualised; both the self and the social system are seen as relative, contingent and constructed. Tension is experienced between the demands for justification by both the social system and internal standards, and the claims of one's individual uniqueness. The identity task is to find a sense of internally valid individuality which can be validated and reciprocally enhanced ('created') in the process of realising conscious acts of commitment.

This structural schematic and the features which seem to characterise the levels, as described in the preceding sections, can be employed in the manner of a global rating scheme to the identity interview material. It was felt to be possible, in this way, to assign each subject to a level of identity structure. This was done with varying degrees of confidence in the accuracy of the rating, but in the majority of cases the hypothesised structures were felt to show a reasonable 'fit' to the forms of the subjects' identity concerns. This gives the scheme a kind of 'prima facie' plausibility but further validation evidence is necessary.

The most important evidence on validity that is available is the relationship of 'identity structure', treated as a further cognitive developmental variable, to the other measures of cognitive structural development. The empirical relationships to logical structure, moral reasoning and 'ego development' are shown in tables 19, 20, and 21. There is a consistent moderate

THE RELATIONSHIP OF LOGICAL OPERATIONS
TO IDENTITY STRUCTURE

	Stages	Logical Operations			
		2	2-3	3a.	3b
Identity Structure	I	6	3	3	0
	II	2	4	4	3
	III	3	2	4	2
	IV	1	2	5	5
$\chi^2 = 12.88$		9 d.f.		n.s.	
$r_T = .34$		$p < .01$			

THE RELATIONSHIP OF MORAL REASONING
TO IDENTITY STRUCTURE

a)

Identity Structure	Stages	Moral Reasoning							
		2(3)	3(2)	3	3(4)	4(3)	4	4(5)	5(4)
	I	1	5	2	4	0	0	0	0
	II	0	1	3	4	4	1	0	0
	III	0	0	2	4	4	0	0	1
	IV	0	0	1	1	2	0	6	3

$\chi^2 = 50.07$ 21 d.f. $p < .001$
 $r_T = .59$ $p < .0001$

b) Group major and pure moral stages, for ease of inspection:

Stages	2(3)	'3'	3(4)	'4'	4(5)	'5'
I	1	7	4	0	0	0
II	0	4	4	5	0	0
III	0	2	4	4	0	1
IV	0	1	1	2	6	3

TABLE 21

THE RELATIONSHIP OF EGO DEVELOPMENT (W.U.S.C.)
TO IDENTITY STRUCTURE

Identity Structure	Stages	Ego Development				
		$\Delta-3$	I3/4	I4	I4/5	I5
	I	0	5	7	0	0
	II	0	4	7	2	0
	III	0	3	5	3	0
	IV	1	1	7	2	2

$\chi^2 = 16.01$ d.f. 12 n.s.

$r_T = .26$ $p < .05$

to low positive intercorrelation with all of these variables, each reaching statistical significance: with logical development, $r_T = .34$, $p < .01$; with moral reasoning, $r_T = .59$, $p < .001$; with ego development, $r_T = .26$, $p < .05$. The level of these correlations is of a comparable order to those between the pairs of the established variables (see chapter 3). The relationship with moral reasoning in particular is the strongest in this study and compares favourably with others reported in the cognitive developmental literature. These relationships are good evidence for a measure of validity for the construct 'identity structure' and for the interview rating method of assessing it.

It is useful in terms of understanding the meaning of the 'identity structure' construct to go beyond this overall comparison to examine particular stage correspondencies between identity structure and the other schemes. At a conceptual level it is easiest to see a qualitative similarity between the levels of identity structure and Loevinger's description of the milestones of 'ego development' (see table 2). Level I, normative conventional identity, is similar to I3, the conventional level; Level II, emergent self-aware identity to I3/4, the self-aware level; Level III, systematic self-aware identity to I4, the conscientious level; and Level IV, autonomous individualistic identity to I4/5 and I5, the individualistic and autonomous levels. This descriptive similarity was predicted on the basis of the conceptual relevance of the content domains. These correspondencies were striking as the descriptive grouping emerged in the course of the study and are reflected in the naming of the identity structural levels. However it is apparent that there is little basis in the empirical relationship for

such a characterisation. The conventional level is not represented in the W.U.S.C. scores. The bulk of the subjects score at I3/4 and I4 in a way that bears only a very weak relationship to identity structure, I4 being non-discriminating. There is a stronger relationship at I5 but involving only two subjects. These results are reminiscent of those between 'ego development' and the other two structural measures.

Examining the relationship of identity structure with logical operations there is clearly a wide scatter of scores and the relationship is accurately reflected by the low linear correlation. There is little evidence that certain logical stages are necessary conditions for development of identity structure as rated here.

While the content domain of moral reasoning might seem further from identity formation than does that of 'ego development' the empirical relationship with identity structure is much more substantial. In contingency table 20b moral stages are grouped together, with the major and pure stage ratings being merged, but the emergence of a new form of reasoning as a minor stage left as a separate 'transitional' stage; this seems the most conceptually justifiable way of grouping for easier data inspection (see Kuhn et al., 1977). This distribution suggests that moral stage '3' is most associated with levels I and II; stage 3(4) with levels I, II and III; stage '4' with levels II and III; stages 4(5) and 5(4) with level IV. (In no instance are these relationships violated by more than 2 cases.)

Conceptually it is possible to interpret these relationships as showing that while there is not a strict developmental correspondence between the domains of moral

reasoning and identity structure, nor any preconditions of development in one domain for the other there is a general developmental parallelism in which stages in the two domains correspond structurally to each other. Thus: normative conventional identity corresponds to interpersonal conformist morality; emergent and systematic self-aware identity correspond to the emergence and consolidation of social system and conscience morality; and autonomous individualistic identity corresponds to the emergence and consolidation of social contract and individual rights (post-conventional) morality. In spite of some dissimilarity in the apparent content of the two domains there does seem to be a structural affiliation between the stage hierarchies proposed by the well established Kohlberg measure of moral judgment and the proposed ego developmental construct of identity structure.

Some statistical test of these associations is possible on a statistical basis using the 2 x 2 contingency tables of the equivalent stages against all the other stages (grouped) on each variable (see Damon (1977) and chapter 3). For level I associated with stage '3', $\chi^2 = 5.10$, $p < .05$; for level II associated with stage 3(4), $\chi^2 < .1$, n.s.; for level III associated with stage '4', $\chi^2 = .4$, n.s.; but for levels II and III associated with stages 3(4) and '4', $\chi^2 = 7.36$, $p < .01$; for Level IV associated with stages 4(5) and 5(4), $\chi^2 = 22.04$, $p < .001$. To the extent that these associations are post-hoc these tests may be viewed with some scepticism, but to the extent that the proposed association of moral reasoning to the levels of the new scheme has a coherent and unambiguous rationale (which is further discussed below) these data may be taken to be confirmatory of

that proposed association.

These empirical relationships provide a degree of support for the identity structure scheme. Clearly it gains credibility to the extent that the cognitive developmental assumptions on which it is based are accepted on the basis of other evidence. This suggests that another approach to validation might be the assessment of the scheme in terms of cognitive developmental criteria, namely: invariant developmental sequence; universality; structured wholeness; hierarchical qualitative discontinuity.

A cross-sectional study such as this is obviously unable to provide good evidence about developmental processes. Identity structure does correlate significantly with age, $r_T = .36$ $p < .01$, suggesting that it is developmental over this age range (bearing in mind, however, the artefacts associated with the age distribution). The best evidence on this criterion is the relationship with the other cognitive developmental variables, especially moral reasoning which has some validating data of its own on this point. This suggests the likelihood of at least a general developmental progression in identity structure.

Not only can universality not be claimed on the basis of the present study but given the levels as characterised in the detailed descriptions, considerable caution must be expressed in this regard. Part of the argument proposed here is that these descriptions contain substantial thematic, as opposed to structural elements and that it is probable that these will be culturally influenced. For example the place and form of political as opposed to 'spiritual' elements in peoples'

ideological concerns is likely to be substantially different under different circumstances. Another example is the nature and degree of peoples' goal orientation. This concern might look somewhat different in young men in our culture who are not attending college. While some form of 'universality' is implicitly claimed by the cognitive developmental form of the scheme it is necessary to become clearer about its essential, structural features.

The degree to which the levels form a structural whole cannot be assessed with the present methodology. In order to do so it would require a rating scheme for particular 'scorable' statements, and a more structured and tightly controlled interview. This was not part of the purpose of this study, nor is it necessarily regarded as a useful extension of it. The immediate purpose has not been to produce another cognitive developmental 'test' but to conduct an 'investigation'. The question of structured wholeness remains of theoretical importance but it must be examined using other instruments.

This still leaves an impressionistic analysis of this question open as a way of generating hypotheses about the form of ego structural development. Most interviews gave the impression of subjects being classifiable in terms of a major ideal typical structure and its associated concerns, but also of their being differences in the degree of consolidation of those structures. It might be possible to describe these differences in terms of Kohlberg's major and minor stage model. However, Loevinger's view that individuals do naturally relate in terms of earlier levels some of the time and also have glimpses of higher ones, and that 'ego development' is an underlying

continuum allowing for some flexibility of functioning could also be argued. In the descriptions of the levels provided all the quotations came from subjects classified at that level, but clearly this involved substantial selectivity on the part of the researcher. All subjects make remarks that seem to (and perhaps, in a sense, do) represent earlier levels, and many make statements which out of context might suggest a higher level.

A vital theoretical difference between Loevinger and Kohlberg is whether structural development is best seen as advancing on a broad front or must be divided into specific content 'streams' to find structural coherence. The present study has adopted an approach more similar to Loevinger's in so far as identity is a relatively broad topic and substantial coherence at an impressionistic level is claimed, but a very few subjects seemed to manifest some 'décalage' between the areas of vocation and ideology. This might be interpretable in terms of the unique circumstances of the case, as the product of interaction of structure with cultural and psychodynamic factors. Were the domain of personal relationships to be introduced into the analysis the impression was that the number of such cases would substantially increase. From the questions briefly exploring the conceptualisation of relationships and commitments to intimacy certain typological patterns emerged which seemed to be similar to those proposed by Selman and Jacquette (1977b). It appeared that these were not necessarily aligned with the identity structures, and in those cases where there was a difference that, in these young men, this was almost always a lag in the sphere of relationships. This speculative possibility represents a fruitful area for further investigation.

The structural criteria of qualitative discontinuity and structured wholeness raise the issue of the discriminability of adjacent levels. This can be addressed empirically with respect to the other cognitive developmental variables. The only variable which might discriminate each level of identity structure from those closest to it is moral reasoning. A test of the discriminability of each level in terms of the distribution of moral reasoning scores of subjects classed at it can be made using the Mann-Whitney 'U' statistic. For levels I and II, $U = 26$, $p < .05$; for levels II and III, $U = 51$, n.s.; for levels III and IV, $U = 30$, $p < .05$. This suggests that in relation to this other measure of cognitive structure levels I and IV are qualitatively distinct, but levels II and III are not so readily discriminated from each other. This is in agreement with the proposed stage associations discussed above (and the test is obviously not statistically independent of the tests made at that point), and with the theoretical description of levels II and III being the emergence and consolidation of structures of self-awareness rather than the major structural transitions between levels I and II and levels III and IV. Internal evidence of the discriminability of the levels, as opposed to this external comparison, would demand an examination of the interrater reliability of the categorisation of the subjects according to the scheme. This has not been undertaken since the terms of reference of this study have not been to construct a 'test' for further use but to conduct an exploration of a theoretical issue (although the scheme has been treated as a variable for the purposes of further explication).

The issue of the qualitative distinction between

levels and the hierarchical integrative nature of the developmental progression is primarily a question of being able to explicate the internal logic of the scheme's essential structure as distinct from a broad description of its associated features. This was done at the beginning of the present section. To recapitulate: at the first level the individual is embedded in a normative interpersonal world, but at the second seems to gain a sense of perspective on that world, separates himself out from it and can compare his personal qualities and values with those of the world; at the third level this self awareness is consolidated in a system of internal standards by which to evaluate the world and himself, but at the fourth level a further perspective is gained on this self-system, re-contextualising it, seeing self and society as relative to their assumptions and defined by constructed sets of 'rules' to which the individual must re-commit himself by a self-conscious act of will or faith. This is the core structural progression which is the basis of the scheme of identity structures, and which is implicitly suggested to be a universal feature of structural ego development.

In fact this structural progression is closely related to the progression inherent in Kohlberg's scheme of moral development, but which is most clearly described in terms of the 'social perspective taking' level of the stages (see table 1) after the manner of Selman and Jacquette (1977b). However the present theory is primarily focussed on the structural development of the self, as opposed to the world in the terms of Kohlberg's (1973) distinction. It thus represents a contribution to his call for a complete theory of structural ego-development capable of encompassing both these poles. The empirical relation-

ship of ~~identity~~ structure and moral reasoning may be understood in terms of this common relationship to a basic structural progression in social cognition or ego development.

This understanding of the development of the self which grows out of this scheme of 'identity structure' receives further confirmation and clarification from the independent theoretical work of Kegan (1979), which became available after the identity structural levels had been outlined. Kegan's scheme (see Appendix C) proposes at quite an abstract level a series of 're-equilibrations' of self and other, in which the self is reconstructed at a new level by attaining the capacity to co-ordinate as 'object' those aspects of its 'reality' to which it was formerly merely 'subject'. This corresponds to our analysis of level change as 'gaining perspective' on the self of the previous level. Kegan's is an important abstract construction of the fundamental theoretical basis of all the cognitive structural schemes as manifestations of 'ego development'. The levels of 'identity structure', based on developments in the ways individuals negotiate the task of constructing an integrated 'self', are readily linked to Kegan's theory of 'self-other' dialectic, and seem to correspond well to it. Level I appears to be Stage 3 (interpersonality), levels II and III the growth and consolidation of stage 4 (institutionality), and level IV the emergence of stage 5 (individuality).

A further pattern may be perceived in the description of the levels. It appears that levels II and IV are relatively similar to each other and different from the other two; and, perhaps less obviously, levels I and III bear some resemblance to each other. One way to describe these similarities is to say

that levels II and IV are relatively oriented towards the 'self' and levels I and III towards the 'other' or the 'world'. This conforms to Van den Daele's (1975) proposal of such sub-types within structural levels (see Appendix C). In his theory there need not be development through all such stages; sub-stages may be skipped, and individuals may tend to be oriented more in one mode as a matter of personal cognitive style. There may be an element of such personal orientation involved in classification to 'identity structural' level. However there is also a developmental structural interpretation of this progression, that initially in growing out of a structure the self is experienced as constrained by its former self-construals, and such constraint tends to be projected, seen as coming from the world, an old world which is 'seen through' as false and limited. Thus stage transition is typically experienced as an assertion of self, and such are levels II and IV in the present scheme.

This discussion of the scheme of 'identity structure', based on the detailed descriptions of the 'levels' as types, has attempted to demonstrate that there is a measure of support, empirical and conceptual, for the scheme as a cognitive developmental hierarchy. It bears a coherent and recognisable relationship to other schemes of social cognitive structure in the neo-Piagetian tradition of Kohlberg. It appears to be based on a similar underlying logic of the development of cognitive ego structures, involving the stagewise reconstruction of the relationship of self and social world.

The theoretical assumption on which the study was based suggests that such cognitive structural development was not the

only element of overall ego development. Psychodynamic and socio-cultural facets of the developmental process were claimed to be conceptually separable. Within the 'ideal typical' descriptions of identity structure provided there is considerable individual variation in the presenting 'ego state'. The theory suggests that this should be explicable in terms of these further elements of ego development which contribute to a person's construction of his personal identity.

Identity Structure and Identity Status

A question central to the study is the nature of the reciprocal influence of cognitive structure and psychodynamics in identity formation. The delineation of the cognitive structural scheme of levels of identity confirms that identity issues are experienced in structurally different ways depending on the level of cognitive structural ego development. The overall effect of these structural differences on the mode of psychodynamic identity resolution (identity status) is shown in table 22.

It is apparent in the distribution of statuses by structural level that there is a moderate correlation between them, $r_T = .41$, $p < .001$. There is a trend for the more sophisticated structures to be associated with the more mature or integrated statuses. It appears from this that structural and psychodynamic development show a mutually facilitative relationship. However, it is also apparent that, although the overall distribution in the contingency table shows a significant $\chi^2 = 18.84$, $p < .05$, there is also a wide scatter of data points, with most

THE RELATIONSHIP OF IDENTITY STATUS
TO IDENTITY STRUCTURE

	Identity Status			
	Foreclosure	Diffusion	Moratorium	Achievement
I	6	3	2	1
II	5	3	2	3
III	2	2	2	5
IV	0	1	6	6

$$\chi^2 = 18.84$$

d.f. 9

$$p < .05$$

$$r_T = .41$$

$$p < .001$$

of the possible combinations of structure and status found. At the normative conventional level low identity statuses predominate and only one subject has achieved an identity within this structural context. At the emergent and systematic self-aware levels there is a more even distribution of statuses, while at the autonomous individualistic level only a single subject is not in the higher statuses. One reading of these data might propose that allowing for error of measurement they tend to support the hypotheses that self-aware ego structures are necessary for achieving, and possibly even for questioning, identity; and that identity exploration is necessary for transition to the autonomous individualistic level of ego structure. But even this interpretation leaves open the possibility that the processes of exploring and resolving identity issues, or of failing to do so satisfactorily, may differ at the different ego structural levels. This is a central issue which bears more detailed examination (although it has implicitly been discussed to some extent in the descriptions of the identity structures).

A general theoretical point at issue is the independence of the two forms of categorisation of identity in their relationship to the other variables. This can be examined by partialing out each in turn from the correlations with those developmental variables. Controlling for identity structure the correlation of identity status with the other cognitive structural measures is as follows: with Loevinger's 'ego development' $r_T = -.19, p = .1$ (increased from $-.06$); with logical operations $r_T = .02, n.s.$ (reduced from $.16$); with moral reasoning $r_T = .04, n.s.$ (reduced from $.27$). Thus identity structure essentially accounts for the whole of the relationship

with cognitive structure (with the W.U.S.C. results occupying an anomalous position). Controlling for identity status, the correlations of identity structure with the cognitive structural variables remains very similar: with 'ego development' $r_T = .31$, $p < .05$ (increased from .26); with logical operations $r_T = .30$, $p < .05$ (reduced from .34); and with moral reasoning $r_T = .55$, $p < .001$ (reduced from .59). These results suggest that identity structure is a cognitive structural variable which accurately represents the influence of ego structural development on the processes of identity formation and is separable from psychodynamic identity development in its relationships with the other cognitive developmental variables.

In their relationships to those socialisation level variables which showed the major relationship to development (in chapter three) - degree of introspection and age - the findings are: controlling for identity structure, identity status correlates with introspection $r_T = .06$, n.s. (reduced from .25), and with age $r_T = .38$, $p < .005$ (reduced from .47); and controlling for identity status, identity structure correlates with introspection $r_T = .43$, $p < .001$ (reduced from .48); and with age $r_T = .2$, $p < .1$ (reduced from .36). Thus the major trends in these relationships are for introspection to be related primarily to level of cognitive structure, and for psychodynamic identity status to undergo more development over this age range.

These results tend to confirm the theoretical proposition that overall cognitive structural and psychodynamic facets of ego development are separable. It would appear to be useful in view of this to further delineate in more qualitative detail the nature of the interaction between these forms of

development, albeit in a somewhat speculative manner given the limitations of the sample and of the numbers of subjects involved in each of these interactions.

Level I

The normative conventional level was described as limited in its capacities for reflection and absolutistic in values and attitudes. The most 'typical' status in terms of this composite description should be the foreclosure and six out of the twelve subjects at this level are rated in this status. The identity system of these foreclosure subjects seems to consist of a single major focus, a domain in which the self is clearly defined in relation to a system of normative values and goals which exist in the subjects' worlds in a taken-for-granted way, with the self, as represented in the 'legitimizing' reflections of the identity interview, exclusively focussed on them. Identity systems seem not to be coherently integrated across domains. These subjects often give one the feeling of 'replaying' a line of opinion appropriated from some other source (most often, of course, their parents). The general surface feeling is of self-confidence and untroubled optimism, but there may be a sense of underlying anxiety about the ambiguity inherent in the cultural climate of college and this emerges in terms of the denigration of the choices and values of others and may also contribute to the rigidity of their exclusive identity focus.

Diffusion subjects present the reverse side of this bright defined picture of the world. The overall impression they give is of a relative depression and hopelessness, resignation to a situation in which they feel powerless. No clear structure

defines their path through the world and they experience this lostness as being trapped by inimical realities. Identity diffusion generally is a coping strategy which deals with the anxiety of personal ambiguity by ceasing to actively care to do anything to change the situation, but these subjects are additionally marked by a lack of any sense of much possibility in life. Missing from this sample are any 'happy-go-lucky', guilt free diffusions at this lowest structural level. They are likely not to be widely represented in a university sample. Such subjects may remain, in fact, at lower levels of structural ego development than this one. Alternatively, at this level they may appear rather as a mixed 'foreclosure-diffusion' identity status.

The one identity achievement subject at this level is theoretically important. The case is relevant to the question of whether 'concrete' forms of structure are likely to limit a person to immature identity resolutions by not enabling him to review and consider a range of possibilities or reflect upon himself. One interpretation could be that this subject (S12) was incorrectly classified. It is possible to check this through other data, and in fact this subject scores at consistently low structural levels (concrete operations, moral stage 3(2), and ego level I3/4) and formed part of the reliability check on identity status where he was rated consistently by both raters.

The form of this subject's identity experiences were quite extreme. He describes his late adolescence in terms which make it appear diffuse, but a sense of dissatisfaction made him go travelling in Europe. The result of this was apparently a near breakdown and a period of very severe disorientation. He emerged from this with a strong sense of his capacity to do

something in life if he wanted to and a desire to gain a professional status. His family background was extremely disturbed and it seems probable that these experiences were initiated under the pressure of severe emotional conflicts. He seemed personally open, flexible and energetic in the style of 'identity achievements'. His values were reminiscent of some of those at the emergent self-aware level, but he seemed to lack the capacities for reflection which defines that level. This lack of structural development may reflect a limitation of underlying cognitive capacities.

The same theoretical issue is relevant to the nature of the moratorium status at this level. In fact the two subjects so rated were regarded as rather anomalous cases on both typologies: as moratoriums with strong foreclosure elements; and as transitional between levels I and II. They both displayed considerable conflict and struggle; both were in open conflict with their fathers; both were overactive in thought and manner. They showed no tentativeness in thinking, adopting clear-cut totalistic value positions but contradicted themselves, often but not always lacking awareness of this. They had no sense of the ambiguity of their positions but saw themselves, accurately, as confused and 'mixed-up'.

These three cases together may suggest that an active experience of choice among alternatives, of doubt about oneself and one's directions and commitments requiring the tolerance of continuing ambiguity and a period of struggle toward resolution is a form of experience which cannot be fully 'contained within', or more accurately 'constructed by', a normative conventional ego structure. Thus people experiencing a potential conflict

over their sense of identity can attempt to control it defensively or progress to a more accommodating structural level. That is, the status that is precluded by this structural form may be the moratorium as we normally understand it. However it appears that this may not entirely preclude flexible identity resolutions which can be achieved by some diffusive form of structural 'loosening' out of which a reworked identity can emerge. An alternative form of 'moratorium' might be the conflicted, 'mixed-up' picture described above, which may not necessarily result in a structural transition. People in either of these states are clearly vulnerable to 'appropriated' foreclosures of identity, of latching on to something 'ready made'.

It appears that the cases at this level who have experienced identity conflict have done so in the context of important personal conflicts. The conclusion may be that identity at this structural level is likely to be maintained at the less integrated statuses and is not reworked unless such attempts at resynthesis are impelled by psychodynamic or cultural conflicts which create strong pressure for resolution. These formulations receive some further confirmation from the data of Rowe (1978) who had a single moratorium subject at concrete operations; again this subject was experiencing a severe emotionally based crisis, such that Rowe questioned whether he was a 'true' moratorium.

A note of caution should be expressed about conclusions based on this sample. Not only is it small, so that other forms of experiencing identity issues may exist, but also individuals at this level in a university context may tend to be somewhat unusual as people. Thus these forms of identity may also be

unrepresentative of normative conventional ego structures in the wider population, being perhaps widely influenced by limitations set by an array of factors - cognitive, psychodynamic and sociocultural. Nonetheless there is evidence for an important influence of cognitive structure on psychodynamic processes.

Level II

At the emergent self-aware level the open structure can seem rather 'diffusive' in general character, but foreclosure remains the commonest status. These subjects were not so cognitively limited or so rigid as at the previous level but had still accepted the norms, ideals and goals of their family without significant questioning. They seemed less defensive than at level I, but tended to be rather bland. They seemed to lack social experience. Relationships with their parents still sounded idealised and maintained as significant supports. Some of these subjects were probably 'developmental foreclosures' who were yet likely to meet with conflicts and questions which would affect them more personally. It is as if such subjects have a capacity for exploration which has remained untested with respect to what is most important to them, either as a result of lack of wide experience, lack of significant conflict in their experience of their background or anxiety at the implications of such questioning.

The emergence of a new level of self-consciousness, the capacity to relate one's self-image to a range of options, to explore and to question normative idealisations are qualities which seem relevant to a mid-adolescent questioning but are perhaps less suited to decision making about the integration of

oneself and the relationship of one's life activity to its social context. Moratorium subjects may thus experience the desire to explore possibilities and to broaden themselves but commitment may be a problem. These subjects seemed to be looking around at a rather unstructured array of options, hoping to land on something suitable. Probably different individuals can make this search with a variety of feelings of anxiety or confidence.

A salient feature of this level is a diffuse quality present in many of the subjects. It seemed particularly difficult to draw a clear distinction between rating subjects as moratorium or diffusion. The searching of the moratorium subjects had a relatively 'cool' quality. Equally the diffusion subjects saw themselves as open to what might come along, and talked in terms of looking for the 'right thing'. Each of these three subjects had experienced periods of doubt and search but had found it difficult to find something that felt right, to commit themselves to anything. Each had general ideas of some direction in which they were headed, but clearly hoped that something which really felt 'right' would appear. There seemed to be a fear of being tied down and stultified (in two of the three). Thus the distinction between the undirected questioning of the moratorium subjects and the continuing but more listless search of the diffusions may be a matter of fine judgement. It is possible that identity status may fluctuate from time to time between these two, with periods of relative 'crisis' and anxious search alternating with 'waiting' periods in a more diffuse style.

Again, the subjects rated as identity achievement were among the less clearly scorable, having some of the qualities of both foreclosure and diffusion statuses. They seemed to have

experienced more disorientation during questioning and felt the need for a sense of direction, but this remained at a general level allowing for further exploration and development. Also each of these subjects could be rather glib, dismissively tolerant or cosily non-questioning; this has some similarities to an 'appropriation' type of foreclosure.

It may in fact be most accurate to consider many of these subjects, whatever their status, as still involved in a developmental process relevant to identity formation. Even those rated achievement show scope for the consolidation of their identity (and so possibly for its reverting to some more stereotyped form). Thus at this level while the status typology points to the relevant parameters it may be harder to employ as a classification system. In particular it is possible that further identity work is associated with the structural consolidations associated with level III.

Level III

The concern with personal integrity and with acting in terms of a coherent system of values at the systematic self-aware level sounds like the stuff of developing ego identity, and there is a preponderance of identity achievement subjects (five out of eleven) at this level. Two patterns seem to be roughly distinguishable among them. In one group of three their account of their developmental history suggests a period of diffusion, with points of crisis, which was quite extended until they found a direction for career development around which they integrated a system of values. In the other two subjects there was a more defined period of crisis in which they had to struggle

for a sense of autonomy but for whom, raters agreed, the re-synthesis of identity that had been achieved was relatively weak, in spite of their considerable cognitive sophistication. In these subjects the themes of responsibility, achievement and particularly security were strong. It is tempting to speculate that these 'weak' but sophisticated achievements had failed to make the developmental transition to the autonomous individualistic level, although they had been cognitively capable of it, while the other group had worked out a sense of identity in the development from level II to level III.

The two moratorium subjects presented in a classic identity crisis. There was a great sense of urgency. These subjects were uncomfortable, not so much searching as battling with the world around them which they felt was unable to provide them with the coherence and value which they sought. Their struggle was concerned with ideology; they wanted an answer but felt unable to reconcile their ideals with workable choices. The guilt they felt with regard to their internal standards was projected and they berated the world for its inadequacy. This picture may be unrepresentatively conflicted but the general issue of an identity crisis at this level probably is this re-integration of internal demands in ideological and vocational contexts.

Identity diffusion, then, represents a failure to meet this task or a retreat from fully working it through. One such subject was fairly cognitively sophisticated but maintained a 'happy-go-lucky' attitude without commitments. This might represent a state of 'pre-crisis' diffusion. The other subject had experienced a period of questioning but the commitments so

formed seemed weak and lacking in personal depth; his manner was somewhat flippant and cynical. Thus there is a sense in this diffusion state of a personal enterprise which has not been fully followed through, and a less than personally meaningful outcome accepted.

A state of developmental (i.e., pre-crisis) foreclosure is shown by one subject. Early commitments had been formed to a direction in life in the context of a well-developed value system and sense of self. This subject demonstrated a personal flexibility and maturity, a capacity for critical thinking and an independence from his family not usually associated with the foreclosure status. But his ideals and goals seemed untested and so unintegrated into a full sense of what it was like to be an autonomous individual in relation to a wider world; there seemed to be a need to resynthesise his commitments. This subject was young (18 years old) and it seems probable that developmental foreclosure as well as moratorium subjects at this structural level are the most likely candidates to make the transition to level IV, although as suggested above this is not the only possible developmental outcome.

However the other foreclosure subject seems to demonstrate that it is also possible to reach the systematic self-aware level of structure and remain in a foreclosed status, by being bound to strong, anxiety-laden childhood identifications and current emotionally charged bonds to the family. Here the commitments formed allow, perhaps demand, an awareness of responsibility to a wider context and a developed capacity for self-criticism but do not support the risk of questioning and reworking those values and identifications.

As described the autonomous individualistic level has identity and commitment as major focal concerns. There is a very strong relationship to the higher statuses and it seems probable that some form of identity questioning is a necessary prerequisite for, or concomitant of the transition to this level.

For moratorium subjects the question of how to affirm themselves through meaningful commitments was a central problem and this involved them with varying degrees of intensity and immediacy in a tensional relationship with their social context, and perhaps in a 'relativistic crisis' of the difficulty of finding a meaningful grounding for their choices. They were characterised by powerful feelings of ambivalence and a sense that both their dilemma and possible ways out of it were somehow illusory or some kind of trap or failure. However this anxiety may be difficult to contact. The philosophical questioning may also function as a strong intellectualised defence and these subjects sometimes presented themselves as sophisticated 'diffusions'. The importance of vocational or ideological commitment may be denied with the assertion that one just needs to take life as it comes. Thus two of these subjects justified their alienation and lack of commitment as well as admitting to their doubts about it. Another subject only admitted to his anxieties after denying them for most of the interview.

Such an alienated or self-indulgent identity diffusion seems to be a potential form of resolution to these subjects' dilemma. The subject rated as diffusion here was autonomous, self-confident, assertive and displayed little sign of anxiety. He claimed to have put questions of meaning aside and to be happy to be

able to dispense with long-term commitments. Thus this is a relatively 'narcissistic' solution, which lacks, in Erikson's terms, 'fidelity'.

Another possible solution at this level might be that of the 'moratorium character'. With a good capacity to cope with ambiguity the issue of searching for commitment could be a very extended one. Such a person may move in and out of trial commitments, alternating with periods of crisis or relative diffusion, with the question of identity continuing to be an orienting one as he confronts the later developmental issue of intimacy.

No subjects in this study were rated as foreclosure at this level and it may seem to be impossible to find this status here, given the centrality of questioning the context of personal commitment. However it may be worthwhile to entertain the speculation that some subjects might respond defensively to the anxieties created by this structural transition with the 'appropriation' of some totalistic solution, such as sophisticated, all-encompassing ideological systems which are capable of addressing themselves to the confusions and insights of this new perspective. For example, two of the moratorium subjects had attended and been impressed by an 'EST' seminar. It must remain unclear whether if such a 'functional retreat' took place it would also be a structural one.

Identity achievements had a flexible, developing sense of self, an obvious adaptability in their responses to present and potential life circumstances. The vocational commitments they had made tended to be in terms of general orienting directions which they were aware were subject to influence and refinement but were not vague. Some had long term goals, claiming to feel

more comfortable having these others talked more in terms of directions for personal development. There was a strong awareness of abstract ideas integrated with and giving wider meaning to these personal commitments. These subjects showed an interest in the process that they had been through in developing their sense of who they were, a clearer conception of their personal history. For some of these subjects there was an emphasis on the continuing process of reworking and renewing themselves in their future commitments and activities. There was also evidence of the increasing priority of the issue of intimacy (as indeed there had been for achievement subjects at the previous level). Personal relationships were a focus of concern and viewed as demanding and growth producing, raising special questions of commitment of their own.

The implication of this discussion of the interaction of cognitive structure and psychodynamics around the issue of identity formation is to confirm the hypothesis that the forms and the processes of identity resolution do differ in important ways depending on the nature of the cognitive developmental structures within which they are worked through. The argument made here is that the Piagetian hypothesis that identity resolution is dependent on structural development can only be maintained in a modified form. The development from normative conventional ego structures is substantially facilitative of identity exploration but it is not equivalent to it, nor is it entirely necessary for it. Identity resynthesis may be impelled by psychodynamic or sociocultural factors, even at the normative conventional level. Similarly, although transition to the

autonomous individualistic level demands that the identity of the self-system be put into question it may still fail to be re-synthesised in psychodynamically integrated ways. However these results do confirm that the probability of mature identity resolution is considerably facilitated by structural development. But the major contribution of this qualitative exploration has been to highlight the way in which this development also affects the form both of the process of identity exploration and of its outcome, be that the achievement of an integrated identity or some less satisfactory resolution.

The central question of this study has been how diverse approaches to 'ego development' relate to each other and how they can be integrated into a coherent account. A specific developmental period, youth, was the forum for examining these theoretical issues as they related to the development of personal identity during this stage of life. This chapter attempts to address that question by summarising, interpreting and integrating the results from both the quantitative and qualitative empirical investigations carried out. These results cast light on the form which an integrative theory of ego development might take, and on the processes involved in the formation of identity.

The first hypothesis being examined concerned the interrelationships of the cognitive structural schemes of development. It was generally confirmed that they did cohere as a group with a small to moderate linear correlation between them. Together they defined the first factor in the factor analysis. The correlation of .50 between logical operations and moral reasoning is in accord with previous studies showing such a relationship between these variables in the range .40 to .60 (Arbuthnot, 1973; Cauble, 1976; Lee, 1973; Langford and George, 1975). The correlation between moral reasoning and Loevinger's 'ego development' of .36 also confirms earlier findings but there is less consistency here. Sullivan et al. (1970) found $r = .66$, and Lambert (1972) found $r = .80$. These studies differed from the present research in the age range studied, and the size of both correlations was reduced by controlling for age to .40 in

Sullivan et al.'s adolescent sample, and ~~.60~~ for Lambert's complete adult age range, while in the present study the size of the correlation was essentially unchanged. This may suggest that these differences result from differences in the range of variance in the populations sampled, and that this is reduced in a college population. Further the moral scoring in the present study tends to reduce the number of subjects at the higher stages compared to the earlier scheme; in this respect the lower relation in the present study may be the result of this restriction of the range of scores but a more accurate reflection of the relationship between the current versions of the two schemes.

The finding of only a low borderline significant relationship of logical operations to 'ego development', one which disappears by controlling for moral reasoning, seems to demonstrate the greater theoretical distance of Loevinger's test from Piagetian structuralism. Loevinger appears not to predict any close relationship of 'ego development' to logical operations and no previous research has looked for one. Thus 'ego development' as scored from the W.U.S.C. only seems to bear a close conceptual affiliation, in Damon's (1977) terms, to those aspects of development embodied in the more social cognitive structural theories. This lack of an independent relationship to logical operations may suggest that components of the W.U.S.C. accounting for additional variance are relatively less related to a strictly structural conception of the development of social cognition; for example that the W.U.S.C. may be more influenced by content elements than other structural schemes (Kohlberg, personal communication).

The general pattern of interrelationships of cognitive

structural variables is further confirmed if the results of the attempt to code the structure of identity seeking processes in a cognitive developmental format is considered. This 'variable' again loaded heavily on the first factor in the factor analysis. There was a strong correlation with moral reasoning of .59, and a relationship with logical operations of .34 (which is intermediate in magnitude between the correlations of moral reasoning and 'ego development' to the Piagetian variable). In spite of a conceptual similarity to the Loevinger scheme the relationship to it was weakest, .26. While these results clearly need to be treated with caution, given that 'identity structure' cannot be regarded as a validated or reliable variable, this pattern does provide further modest support for the overall pattern of results discussed above.

Cognitive structural theory generates hypotheses which demand a closer examination of the form of the stage relationships between different schemes. The previous finding that there is a décalage between the development of logical operations and of moral reasoning (Tomlinson-Keasey and Keasey, 1974; Kuhn et al., 1977) was confirmed in this study. Emergent formal operations was a necessary but not sufficient condition for the development of emergent (minor stage) principled moral reasoning in the present data. Moreover it was a necessary but not sufficient condition for stage 4 reasoning to be a major stage, though not for its emergence as a minor stage. This is more in accord with Kohlberg's (1975) theoretically predicted stage correspondencies (quoted in table 3); it is a result not confirmed by Kuhn et al.'s (1977) data, although they did find emergent formal operations to be necessary for consolidated, pure stage 4 thought.

A further feature of the present data was that the highest stage of formal operations was here a 'sufficient' condition for the development of principled moral reasoning, a result which again is not confirmed by Kuhn et al.'s (1977) data.

How are these results to be integrated? In such a qualitative structural examination of cognitive developmental data disconfirming cases of proposed necessary or sufficient conditions are vital and must be respected if they exist in sufficient numbers to withstand the criticism of measurement error. Thus the Kuhn et al. (1977) results where they contradict the present data in these ways take precedence. However it would be helpful also to understand the reasons for trends in these data. Another problem is that for the concept of *décalage* to make sense, stage correspondencies must be clearly delineated. Thus it is possible to preserve a very rigorous version of the *décalage* hypothesis, amounting to a 'necessary but not sufficient condition', by proposing that formal logical operations correspond to principled moral reasoning and are necessary for it, as Kuhn et al. do. This in essence moves Kohlberg's (1975) hypothesised correspondencies 'up' one stage. This leaves a problem with explaining the *décalage* at pure stage 4 (for Kuhn et al.'s results) and at major stage 4 in the present results.

An alternative interpretation might be to preserve Kohlberg's proposed stage correspondencies but to adopt a more flexible position on the nature of '*décalage*' similar to Damon's (1977). In this view formal structures may be available with respect to certain conceptual domains but not necessarily demonstrated on 'logical' tasks. Thus emergent basic formal operations might underlie the emergence or consolidation of stage

4 reasoning but not necessarily be demonstrable on the Piagetian problems, although a relationship between these stages may be apparent. It is further possible to speculate that the differences between the relationships evident in the present data and those in the Kuhn et al. study might result from differences in the populations studied. Kuhn et al. did not use an entirely college based sample. It could be that subjects in higher education who have formal structures available are more likely to be capable of demonstrating these on the logical Piagetian materials than those who are not so well educated. This is in accordance with the suggestion that performance on formal operations tasks is influenced by cognitive style (Pascuale-Leone, 1969) and specialised experience (Piaget, 1972). Hence the 'necessity' of formal performance is demonstrable at a lower moral sub-stage, major stage 4, in the present study.

The strongly facilitating role of fully developed formal operations for principled morality in these data suggests a different but related interpretation. Kohlberg hypothesises that this level is necessary for principled reasoning, which it clearly is not either in these data, or in Kuhn et al.'s, but that additional elements of cognitive stimulation are required for development. It may be that in this college environment subjects with strongly developed formal structures are very likely to receive and respond to a context where such stimulation is available.

Consistent with the lower relationship of Loevinger's 'ego development' to the other variables there was less evidence of a coherent form of stage correspondence between them. It did however appear to be a possibility that emergent formal

operations is a necessary but not sufficient condition for levels I4/5 and I5. Loevinger does not make specific claims about this but extrapolating from the correspondencies proposed by Kohlberg (and those proposed by Kuhn et al. (1977) discussed above) this is a consistent result, but it would require replication to be more confident about it. The correspondencies with moral reasoning stages tended to confirm Kohlberg's (1969) proposals that stage 4 is similar to I4, and stage 5 to I5 even although these were based on an earlier definition of the difference between conventional and post-conventional reasoning. Such 'correspondence' is very loose however and the I4 level was very indiscriminating showing a broad spread of scores across a moral stages 3(2) to 5(4). The W.U.S.C. produced a poor discrimination among subjects in this population with 80% in levels I3/4 and I4. While this is not necessarily a criticism of the test and might accurately reflect the levels of ego development of these subjects it does reduce its value as a characterological variable, compared to the Kohlberg assessment which places more subjects at the lower stages of development (stage 3 and below).

A secondary interest of the study was to examine the hypothesis that there is a probabilistic relationship between cognitive structural development and certain common concerns of the adolescent related to an increased degree of introspection, greater usage of ideologies, and an expanded future time perspective. Of these variables the tendency to have more introspective concerns was the one which most consistently bore some relationship to the developmental variables, and its most substantial relationship was to moral reasoning. Neither logical operations

nor 'ego development' was clearly related to it, although there were low positive correlations which are best regarded as non-significant trends. Ideology showed no clear relation to any of the developmental variables. (Those non-significant trends which did appear - with logical operations, 'ego development' and age - were all in the negative direction. This is counter to prediction but may be artefactual.) Only 'ego development' showed a relationship to temporal perspective. Interestingly this appears to be counter to the direction predicted, since there was an increase in ongoing concerns and a trend which suggested a small decrease in 'maximum time perspective', the tendency to list concerns far in the future.

Thus the only prediction to be clearly confirmed is the increase in self-oriented, 'introspective' concerns with higher levels of moral structure. This is in accord with Blasi and Hoeffel's (1974) contention that changes in the content of adolescent thinking are more likely to be related to developments in social cognitive structures than to those in purely logical schemata. All the results for the Piagetian measure were small and of doubtful significance. The other social structural measure, 'ego development', produced a result counter to the predictions regarding temporal perspective. One interpretation of this could be that there is a curvilinear relationship of structure to the focus of concerns about the future in adolescence and youth. Thus while in the early phases of adolescent development time perspective expands, by the college years the more sophisticated thinkers come to focus more on the present again.

Identity status also showed a relationship to

increased introspection with the higher statuses, but to no other content variable. The relationship was markedly reduced by controlling for age which itself shows a relationship to introspection. The procedure of controlling statistically for age is problematic in so far as it might be related to identity status in such a way as to reduce the variance on this variable and obscure a valid relationship. However age could itself be regarded as most closely related conceptually to content variables in its effect, in terms of general social experience and 'content' learning and of changing social status. These effects might contribute to different personal concerns independent of other age related development in identity or cognitive structure. This would be the conservative interpretation of these results but the issue remains in doubt. The relationship of moral reasoning to introspection was not so affected by controlling for age, and the conclusion that this change in the orientation of conscious concerns is affected by the level of 'social cognitive' structure can be held with some confidence.

The result that, of the content variables, introspective tendency bears the clearest relationship to the developmental variables must be viewed with caution since it may reflect less the nature of the changes which occur than the differential sensitivity of the measurement instrument to each aspect of the subjects' concerns. Temporal perspective is notoriously difficult to measure accurately and different assessment methods intercorrelate poorly (Fraise, 1963). Ideological concerns may not have been most reliably elicited by an instrument which asked for the subjects' 'hopes and fears'.

Another source of data is the qualitative analysis of

the interviews in terms of the structure of concerns about personal identity. To summarise briefly this suggested that subjects did become more, and more differentiatedly, introspective with developing identity structure. The form of peoples' ideological concerns changed: they were of increasing importance at levels II and III as compared to level I, but at level IV people had a sometimes intense but frequently ambivalent relationship to ideologies. At level I people often had long term goals but a poorly differentiated view of the details of the future which perhaps became clearer at levels II and III, while at level IV people were often at pains to deny concerns about the distant future. Thus these impressions from the qualitative data tend to confirm to some degree the pattern of findings from the 'hopes and fears' written form. In this age range the tendency to be more introspective does continue to develop with increasingly sophisticated cognitive structure but the tendency to use ideological modes of thought and to have an expanded future time perspective may bear a more complex relationship to structural development.

The major focus of this research was the relationship of cognitive structure to the development of personal identity. The data did not on the whole uphold the general hypothesis that there should be a linear relationship between cognitive structural development and growth to more mature forms of identity. The identity status variable defines a separate factor in the factor analysis from that defined by the cognitive structural variables. These results are supportive of the theoretical assumption, which was outlined as a basis for the study, that cognitive

structural and psychodynamic analyses are worth considering separately in a complete theory of ego development. This leaves the way open to consider more specific interactions between them.

There is little evidence of any relationship between logical operations and identity status, and the hypothesis by Marcia (1980) and Kohlberg and Gilligan (1971) that formal operations is a necessary condition for identity exploration and so for the higher identity statuses was not confirmed. Previous data on this relationship have been conflicting: Berzonsky *et al.* (1975), Cauble (1976) and Wagner (1976) report essentially no relationship, but Rowe (1978) found only one exception to the formal operations requirement for the mature statuses. The data from the present study appear to confirm the finding of a lack of relationship, and these data are free of some of the methodological problems of the earlier studies. Identity exploration of any depth is certainly not equivalent to the development of formal operations as a purely cognitive developmental theory of this age period would have to propose, since there were many lower identity status subjects at the basic formal operations level. Nor is the development of formal structures in the logical domain even a necessary condition for identity exploration as predicted by a number of authors.

Two further points should be noted following from this however. There was a suggestion in the present data that fully mature formal operations (stage 3B) is strongly facilitative of identity exploration. There is only one exceptional case and, assuming that this was not the product of measurement error, it could still be argued that this subject may be very likely to undertake such exploration in the future. This finding is related

to the finding that subjects at this logical level have all attained major stage 4 moral thought. This was previously linked to the possible effects of the college environment on subjects with highly developed cognitive capacities. These may be best regarded as facilitative conditions. It may also be that this result points to a link of identity status to structural development through the more social cognitive theories (in this case through the facilitating effects of relatively sophisticated moral development).

This is connected to the second point, which arises from the discussion of the connection of logical structures to moral development. It was earlier pointed out that Damon (1977) and Piaget (1972) suggest that formal structures may be displayed implicitly in some social domain while other performance factors inhibit their use on logical test materials. Thus, if this extension of the theory is granted it is necessary also to examine the relationship of identity to other social cognitive theories with the hypothesis of the necessity of 'formal operations' to identity exploration still in mind.

Loevinger's 'ego development' also appeared to bear little relationship to mature identity status. This seems to disconfirm any suggestion (see table 5) that Eriksonian theory could be subsumed by this structural view of ego development. This is not only counter to prediction but counter to the earlier results of Hopkins (1977) who found a correlation of .53 between these variables.

The main difference between that study and the present one is the sex of the subjects. The validity of Hopkins' assessment of identity must be open to doubt since the interviews she

used had not been validated beyond this very relationship to the W.U.S.C. But the difference in results may also reflect a difference in the nature of identity development in women. It is widely held that the formation of identity in women is closely linked to issues of intimacy (e.g., Matteson, 1979). In the absence of a clear theory of identity development in young women it may well be hard to distinguish the sense of ego identity from sophisticated interpersonal cognition and there might also be a closer link between these areas for women than for men. Sophistication about the issues of interpersonal relationships is what the items of the W.U.S.C. are primarily concerned with. It is also worth recalling that this 'ego development' test was originally developed and validated on female subjects (and the scoring manual for the male version remains unpublished). These conflicting results, then, may be a consequence of substantive differences in the parameters of identity development between sexes, a lack of clarity in the theory of female identity, the differential validity of either or both of the measurement instruments between the different sexes or a combination of these factors. Clarification of this question must await further work on the nature of identity development in young women.

The medians of the identity statuses on 'ego development' were not ordered in either of the theoretically expected ways but rather diffusion-moratorium-achievement-foreclosure. This result is not statistically significant but there may be a suggestion here that scores on the W.U.S.C. are unduly influenced in favour of subjects with clearly defined views and this might bear further investigation. Another non-significant structural feature of the relationship was that both I5 subjects were

identity achievement. Thus identity development might prove to be a necessary condition for development to the autonomous level. This result is comparable to that for post-conventional moral reasoning discussed below, although it should be recalled that the empirical relationship of moral and 'ego' development is not very close.

Moral development also showed little evidence of an overall relationship to the identity statuses. There was a low positive correlation, but even this disappeared on controlling for age and so may represent only parallel age related development (although this statistical procedure may so reduce the variance of both variables at this period of rapid development as to obscure their relationship). However there was a statistically significant confirmation of the prediction that the higher identity statuses, which require one to question one's identity, are a necessary condition for the attainment of post-conventional modes of moral reasoning. There was also at least a possibility that to consolidate such reasoning as a major stage one may have to have achieved a new sense of personal identity. However there were roughly equivalent numbers in each of the identity statuses at the conventional moral stages. Identity exploration is not 'sufficient' for, or equivalent to the transition to post-conventional morality.

The relative lack of overall relationship is consistent with the results of Cauble (1976), but she failed to demonstrate the conditional stage relationship found in the present study. It is probable that the 'Defining Issues Test' of moral judgement used in her study failed to accurately discriminate post-conventional reasoning. The present data do not confirm Poppin's

(1974) claims that particular identity statuses tend to be at identifiable moral stages. The pattern of results is more similar to Podd's (1972) findings of a preponderance of high status subjects at the post-conventional level and a mixture of all the statuses at the conventional level. The present data were more clear-cut than Podd's which showed some low status subjects who were post-conventional. This could be attributed to a more accurate assessment of post-conventional structure in this study. Rowe (1978) also found low status subjects at the post-conventional level (2 out of 5 subjects at this level). The moral assessments in the Rowe study are also open to question, but are certainly more reliable than Podd's. This could suggest that it may be possible to use moral stage 5 thinking without much identity exploration but that this is relatively unusual. Rowe's result that identity achievement subjects were all post-conventional is plainly not replicated by these data.

The findings of the present study thus support the hypothesis of Kohlberg and Gilligan (1971), Kohlberg (1973) and Marcia (1980) that identity questioning is a necessary but not sufficient condition for the transition to a post-conventional moral perspective, and they do so more clearly than the data of Podd (1972) from which this hypothesis drew its initial support. To understand the nature of development at this period more clearly, however, it is important to consider the relationship of identity to the cognitive structural variables as a group.

The simplest reading of the results of the study is that cognitive structural development has little influence on the development of mature forms of identity which are equally likely to be found at lower structural levels (although the highest

levels of logical structure greatly facilitate identity exploration at least in the college environment). However to develop the higher levels of moral structure, the emergence of post-conventional reasoning, it is necessary both to have the requisite emergent formal operational structures and to have questioned one's ascribed identity, confirming Kohlberg and Gilligan's (1971) and Kohlberg's (1973) theories. It is possible that an analogous situation applies to the autonomous (I5) level of ego development, which required in these data (on only two subjects) emergent formal operations and an achieved identity.

The other aspect of Kohlberg and Gilligan's (1971) hypothesis that formal operations and the questioning of conventional morality are both central to an Eriksonian identity crisis seems to be disconfirmed by these data (as it was by Podd's (1972) results which they quote). However it is important to bear in mind Damon's (1977) view which draws attention to the possibility that formal structures may be implicitly present in social cognitive stages. The present data showed formal operations to be necessary for consolidating stage 4 moral thinking, which is more in accord with Kohlberg's (1976) view of structural correspondencies. Thus formal operational capacities might be implicit in all stage 4 moral thought, as discussed earlier, and might be necessary for identity exploration. But again the data do not confirm this looser version of the hypothesis; the higher identity statuses are found at the lower stages of conventional morality (stage 3). While it may be of interest to examine identity development at stage 2 of the pre-conventional level this would probably have to be part of an investigation of identity in a non-college population. From the

present data it seems that neither emergent formal operations, even as implicitly present in moral cognitive structures, nor the questioning of conventional morality is an essential element in identity exploration as defined by the Marcia methodology.

Thus an identity crisis is not necessarily an intrinsic part of the 'stabilisation' of structural ego development at the juncture of conventional and post-conventional morality as Kohlberg and Gilligan's (1971) cognitive developmental analysis of identity proposes. However, while emergent formal operations may be necessary to consolidate stage 4 moral thought, identity exploration appears to be a necessary condition for moving beyond it. It is not entirely clear what 'necessary' in this logical sense means in terms of psychological processes. Is it necessary to explore one's identity and thus to be 'open to the experience of moral dilemmas in one's life' as Marcia (1980) puts it? Or is an identity crisis a necessary concomitant of structural advance at this level, taking place as a result of disequilibrative conflicts in one's moral perspective? Kohlberg (1973) speaks, rather vaguely, of the centrality of the experience of personal commitment and responsibility to this structural transition. This suggests that there might be quite an intimate conceptual link between the domain of self and identity and the transition to a post-conventional perspective. This interpretation may be regarded as receiving some support from the fact that only identity achieved subjects had post-conventional morality as a major stage. The 'necessity' of identity exploration for post-conventional morality might be best construed in terms of a 'reciprocally enhancing' relationship

(Marcia, 1980) at this structural level.

Kohlberg (1973) seems again to subsume the nature of identity exploration to the issues of this structural transition, pointing out that to complete the transition in the moral domain requires further 'cognitive stimulation' of an appropriate kind so that some people remain at the conventional level morally having resolved the identity crisis. This is again subject to the criticisms made of Kohlberg and Gilligan (1971) that our data show identity as an issue prior to this moral level. But if identity is so closely interlinked with this higher structural transition then it may be that the processes of identity exploration are of a different form at high and low levels of cognitive structure.

This pattern of relationships in the data is consistent with the theoretical assumption made in the introductory chapter that it was productive to conceptualise ego development in terms of separable though interacting elements, described by different forms of analysis. Thus identity appears to be a relevant issue for individuals during this developmental period over the full range of cognitive structural levels found in this sample. This analysis proposes that personal identity is a concept which can best be thought of in terms derived from psychodynamic and sociological theory. It is likely to be an issue for all individuals during this phase of development as a result of growth producing changes in such factors as emotional balance, family relationships, role demands and expectations and so on. This view finds support in the data in the relative overall independence of the ways the subjects have resolved the identity issue, and their level of cognitive structural development.

The usefulness of preserving this analytic independence and of avoiding subsuming identity development to structural development does not imply that there is no interaction and no empirical relationship between these aspects of ego development. The data suggest an important relationship between identity exploration and the structural transition to a post-conventional perspective. Kohlberg (1973) suggests that the identity relevant issues of personal responsibility and commitment are intrinsic to this phase of moral development, but morality as such is not the primary concern in this study. Rather the moral judgement scheme is employed in the study primarily as the best developed measure of social cognitive structure. This use seems to be borne out, since it has produced results which are more theoretically coherent and more differentiated than the parallel Loevinger 'ego development' scheme. The interaction between cognitive structural ego development in this broad sense and identity has been further explicated by the attempt to investigate issues pertaining to the development of self and identity (such as responsibility and commitment) directly, according to cognitive developmental principles in the 'qualitative' part of the data analysis.

The outcome of the cognitive developmental analysis was extensively discussed in chapter 4. Perhaps a major point to be emphasised in conclusion is that this analysis proved to be possible and achieved some measure of prima facie validity. While a thorough attempt to investigate the reliability and validity in terms of cognitive developmental criteria would require substantial further research, the scheme, as outlined in table 18,

appears to have a comprehensible internal coherence and to be comparable to other schemes of the development of the self. The classification of subjects according to the scheme showed an encouraging level of correlation with the other structural variables, of the same general magnitude as their intercorrelations with each other and a particularly strong relationship with moral development.

It is best not to regard the scheme produced as yet another contribution to the 'streams' matrix theory of ego development, but more as a cognitive developmental investigation of an important topic. But it does address itself quite closely to the problems of ego development by virtue of its focus on issues of the transformation of 'self'. As such the scheme is comparable to Loevinger's theory, but while there are conceptual similarities the empirical relationship was low. There is an even more striking conceptual affiliation with Kegan's (1979) theory, with its focus on successive reconstitutions of the self through a kind of internalised self-perspective taking parallel to that in the social world. Kegan's work grows out of the Kohlberg/Selman tradition and he claims a strong empirical correlation between a classification of psychiatric patients' symptoms according to his scheme and their stage of moral development (Kegan, 1977). These independent investigations with comparable results, both bearing a relationship to the Kohlberg scheme, form a kind of cross-validation of this theoretical construction of ego development. It was concluded that a general correspondence existed between identity structure and the other 'social cognitive' stages such that normative conventional identity was related to stage 3, emergent and systematic self-aware identity

to stages 3/4 and 4, and autonomous individualistic identity to stages 4/5 and 5.

This relatively 'broad-band' approach to ego development must bear a somewhat uneasy relationship to the more 'fine-grained' analyses of social cognition such as Damon's (1977), but they need not be incompatible. Basic structural ego development can be viewed as one of the major 'core structures' which may be differentially manifest in a variety of content domains. It is thus similar to Selman and Jacquette's (1977a) view of social perspective taking which they trace with respect to specific forms of conceptual development. They then go on to raise the further question of the situational and personal determinants of the use and manifestation of these structures, their 'oscillation'. The present investigation can be viewed as an attempt to trace certain core structural developments of the self through how they are employed in a domain which is highly charged with personal significance and social pressure, the constitution of one's personal identity. In so far as such structures have much in common with those employed in reasoning about moral dilemmas there should be a relationship to the Kohlberg scheme but certainly not a perfect one. The issues raised by this construction of the theoretical relationships involved concern firstly the nature of the factors which influence, constrain and facilitate the development and manifestation of these ego structures in the area of identity and secondly - the issue primarily addressed in this study - the manner in which such structures influence the form of personal identity and the nature of the process through which it is constructed.

The apparent viability of this cognitive developmental

approach to identity confirms the general assumption of the study and supports the conclusion of the qualitative analysis, that the cognitive structural and psychodynamic conceptualisations of identity are worth considering separately. However identity structure showed a stronger relationship to psychodynamic identity development than the other structural variables, one which subsumed all of the relationship of structure to identity status. While this could be partly attributed to methodological effects (both variables being scored from similar interview data) it also can be understood in terms of the 'décalage' of structure in different areas as being a more accurate representation of the effects of 'relevant' structural developments on identity formation processes. That is, it is not 'formal logical operations' as such, or moral reasoning which is related to identity development, but the construction of the self in relationship to the social world. If this is so, the influence of such 'ego structures' on the probability of mature identity resolutions is quite substantial. The argument of this thesis is, however, that this influence probably does not extend to creating necessary or sufficient conditions for psychodynamic development. Rather it is important to understand the qualitative form of the interaction of cognitive structure and psychodynamics.

The nature of this influence of ego structure on the form of personal identity constituted the basis of the cognitive developmental typology. The influence of structure on the processes through which identity issues are resolved was speculated upon (necessarily on the basis of a few subjects) in the section discussing the identity statuses at each level. The major contribution of this research is to indicate that it is probable

that individuals' identities and the processes through which they are formed differ according to their ego structural level. A further suggestion which may be made is that the areas of cognitive structure and psychodynamics are reciprocally interactive in their effect on identity development, and that this interaction may involve other factors not directly related to identity itself. It is worth speculating upon the nature of some of these developmental transitional processes in order to relate the present research to a more complete conceptualisation of ego development.

A first point to note is the 'gap' at the lower end of the cognitive structural hierarchy in this sample. The research casts no light on the nature of identity issues for individuals at stages 1 and 2/3 of ego development. One might speculate that at the 2/3 transitions there will be issues concerning acceptance by relevant reference groups and the internalisation of their norms together with feelings of being controlled or constrained by these, but the sense of self and the form of identity resolution processes involved remain unexplicated. Research on this issue must extend beyond college populations and in doing so must seek to discriminate between differences produced between the populations by virtue of differences in values, expectations and opportunities produced by the culture and those differences between individuals that are a result of cognitive structural level.

At the first level in the present hierarchy identity is defined in terms of the norms and values of a given social world. One may be securely located or lost but the definitions of oneself and the world are given. In order that such an identity be

reworked something must disrupt this given world. The suggestion from the present data (only a single case) is that a way that this might occur is as a result of quite severe emotional conflict which could result in a dislocation of self and re-appropriation of new personal values and social norms. Some confirmation of this could be inferred from Rowe's (1978) single non-formal operational moratorium who, he reports, was in an emotionally based crisis.

With respect to the requirements for making the transition from this to the next level (i.e., from stage 3 to 3/4 or 4) it may still be possible to entertain the hypothesis of requisite cognitive capacities if one accepts Damon's (1977) contention that formal operational structures need not be demonstrable on logical tasks. Were this to be the case and stage 4 was held to embody early basic formal operations, then the relationship of logical structure to identity formation processes resides in the difference in the probability of achieving an identity, in the manner of doing so and in its form as delineated by the differences between identity structural level I and levels II and III. Thus the hypothesis concerning the importance of formal operations for personal identity could still be tenable but in a much modified form.

One might also speculate that there are certain psychological factors which are relevant to the ease with which this stage 3/4 transition is made. The transition appears to be closely linked to issues of loosening ties to the family and the primary social group. There may well need to be either strong pressure (internal or external) to do this, or else good support (again either from internalised personal security or from

the culture) in moving 'out'. If the family and culture form a close and relatively undifferentiated social world, or if personal ambivalence about attachment is a leading anxiety then it is possible that the cognitive structural transition to a self-conscious independent perspective on the self could be fraught with anxiety, and ego development inhibited.

The implication of making the transition to stages 3/4 and 4 is that identity becomes defined in terms of a self-conscious self-system with an increasingly differentiated view of the self and how and where it could fit into a systematic social world, and a progressively consolidated sense of its potential to realise itself in terms of a system of personal values. But the data make it clear that this does not necessarily imply that this will result in a reworking of past self-identifications and acquired values in any substantial depth. Though the potential is there, such change creates anxiety which can be responded to in different ways. In order to undertake such reintegration, psychodynamic theory would suggest that the individual needs sufficient emotional freedom to be able to question past values and explore and experiment with alternatives. Moreover a psychosocial view would point the need for a social context which can permit such exploration yet respond to it with some belief in itself, and which provides the opportunity of social roles capable of allowing meaningful commitment through action which will be self-validating in terms of the person's consolidating internal sense of self-worth and integrity. Foreclosed, diffusive, or extended moratorium reactions would be the consequence of failure in these systems. It appears that all of these processes can take place within the cognitive context of these levels of.

The finding of the present study that a transition to a further higher level of ego development was descriptively discernable and was statistically discriminable in terms of its relationship to the post-conventional moral stages is to some extent a validation of Kohlberg's (1973) view that there exist distinct structural forms of development unique to early adulthood. This stands in contrast to views such as those of Gibbs (1977) which see these 'stages' as a kind of tendency to philosophical reflection rather than as genuine structural transformation. There was no evidence in the present data that this transition depends on new logical structures, although if one follows Kuhn et al.'s (1977) more conservative interpretation of the data it could be claimed that this is the transition which requires at least emergent formal operations. Kohlberg (1976) sees it as requiring full formal operations, while Gilligan and Murphy (1977) seem to claim that it may correspond to Riegel's (1973) proposals for a stage of 'dialectical operations'. Conclusions regarding the 'logical' cognitive requirements of this structural transition may need to await a clearer understanding of the nature both of adult cognitive schemes and their relationship to social structures in general. The stages were described here in terms of a new self-perspective taking capacity.

The formation of identity at this level seems to be intrinsically involved with the nature of the structural transition itself which appears to represent a process which could be termed individuation. It consists of gaining perspective both on social role systems and on one's own self/value system, seeing them as contextually relative. This would seem necessarily to

involve questioning one's own identity with respect to one's society, one's personal relationships, and one's own standards and modes of self-understanding. It is this level to which the original phenomenological analysis of the process of commitment by Hunter (1974), used as a guideline for the investigation, really applies. This description implied a self-conscious re-establishment of social bonds and personally meaningful involvement through an act of willed commitment. This is not the phenomenology of identity formation at earlier structural levels.

This implies that identity exploration is inevitably attendant upon or a precursor to the transition to this level of ego development. It is in this sense that the experience of personal commitment and responsibility may be necessary for the level of post-conventional morality (Kohlberg, 1973). The necessity is a logical structural one dependent on the formal nature of the stage of ego development. But it must also be a psychodynamic requirement. That is, one might assume that an individual must be capable of sustaining this experience with the emotional and motivational implications that it has for him. This individuation process is likely to involve certain experiences of anxiety such as a sense of isolation and inability to communicate with others, feelings of emptiness, of being unvalidated by an internal sense of understanding and valuing oneself, of being fragmented, and of being ineffective and out of control (cf. also Kegan, 1979).

It seems probable that a relatively fluid and pluralistic social context is a necessary precondition for this form of experience to be possible, at least on any widespread basis. The internal psychodynamic requirements are less clear, though

many subjects at this level seemed to have been particularly achievement oriented, value conscious people with rather demanding superego structures, and to have experienced more than average independence and responsibility in late adolescence. This constellation may set some pressure to free oneself from internal demands together with an ability to be unusually self-contained. The implication of the view presented here is that while identity exploration is necessarily attendant upon this transition in structural ego development the psychodynamics of the experience need not require that there be universally 'high status' subjects at this level. The anxiety of the transition may again be responded to with defensive resolutions, including diffusion and perhaps the appropriation of complex but totalistic ideological systems. A structural 'retreat' to the preceding cognitive stage also may be a possibility. In the data of this study however only one subject was in the lower identity statuses.

The assumption which underlies this speculative discussion of identity and ego structural stages is that while the level of cognitive structural development affects the form of identity and the processes by which it is constructed, there is also a reciprocal influence of psychodynamic and social context factors on structural ego development. Structural transitions have implications for issues of ego development that are best analysed in terms of the other elements of an integrative psychosocial theory of ego processes. The general point that is being argued is that the development of the ego is best seen as a complex, multi-faceted and reciprocally interactive process. Structural development including the 'identity structures' is

only one element of that process which ultimately cannot be separated from the others if a fuller understanding is to be obtained of the developmental interactions by which an individual course of development is governed.

A number of speculations about the nature of some of the parameters of such interactions were made in the preceding discussion. It might be possible to illustrate some of these post-hoc from data of the present kind. However what is really required is the specification of hypotheses about particular developmental constellations and the creation of research strategies which are capable of handling such complex data on an idiographic basis. This is close to the kind of structural research exploration attempted in cognitive developmental research, particularly that undertaken on a longitudinal or interventionist basis. It may be profitable to widen the scope of such investigations to include the assessment of other facets of ego development. It is probable that the developmental interactions involved in these processes are sufficiently complex and subtle that predictions and analyses may need to be undertaken on a single case basis to explicate the necessary, limiting and facilitating conditions of particular ego developmental transformations.

The characterological use of the cognitive developmental hierarchy has implications for our understanding of development during adolescence and youth. There exists a kind of ideal stereotype of the developmental course during this period of life, embodied both in commonsense understanding and in psychological theory. This can be explicated in terms of the

theory of cognitive structural ego development. It can be seen to posit certain normative age transitions of ego structural stages which correspond to putative age typical behaviour and experience.

This stereotype would go something like this. In early adolescence a young person is consolidating at ego stage 3 and is invested in stabilising a sense of himself in terms of clear social group norms, though the normative values and expectations of parents are still important to him. By mid-adolescence he is making the transition to stage 3/4 in which he is separating from his idealised parents, questioning social norms, 'seeing through the 'hypocrisy' in the adult world and experimenting with new peer group and self derived values in a phase of rebellion. In late adolescence the individual is consolidating a more differentiated sense of himself at stage 4, constructing critical ideological systems and exploring with himself how he can best contribute his talents to the world in a responsible way and fulfill his potential. He goes to college during his youth and in stage 4/5 undergoes a further radical questioning of himself, his directions and his commitment to social institutions, an identity crisis, during which he may have a period of moratorium, of withdrawal or further experimentation; he is making early explorations of real intimacy. By the mid-twenties in young adulthood he has reached stage 5, has committed himself to some reintegrated identity and is ready to begin a full exploration of and commitment to true intimacy.

While it is well understood that there are social and emotional variants in this developmental stereotype, cognitive developmental research now makes it clear how the structural

transitions and the issues that arise from them are also far from universal. The structural 'time sheet' assumed in this description applies only to a minority even of those young people who are headed for higher education. A major point of the present study has been to demonstrate that the social and dynamic issues which arise for people in the course of development do so in a variety of cognitive contexts. The complex individual nature of the individual's total ego structure is mirrored by the fact that developmental 'pathways' are also multiple. This is not to degrade a social developmental psychology to the platitudinous 'everyone is an individual', but rather to point to the need to understand the individual's ego structure, and in particular the cognitive developmental stage, with which he enters a developmental period and approaches the predictable issues which it will raise. Even from the limited perspective of cognitive developmental structure there is not a single course of development in adolescence and youth but several. As discussed in the introduction only a few researchers have begun to explore the implications of this (Josselson et al., 1975; Goldberger, 1975).

This more differentiated perspective on development moves theory away from an overly idealised view of what is normative. But this does raise issues of value, of normal and abnormal in development in the sense of health and pathology. Toward what ends should our interventions and institutions aim? The goals suggested, implicitly and explicitly, by cognitive developmental theory are those of the developmental end-points of the structural hierarchies. This is particularly true of Kohlberg's moral, and sometimes moralistic, development theory. This viewpoint will tend to accept the idealised stereotype of

adolescent development, if not as psychologically normative, at least as humanly desirable. But as Fowler (1974) points out cognitive structural sophistication is a shallow definition of psychological integrity or human value. Each structural level has its own capacities and its own problems, and as we have proposed, structure can be viewed as a matrix within which similar social and psychodynamic issues must be worked through.

The contribution which a more differentiated theory of ego development can make is to increase respect for the individual by increasing understanding of his personal world and the nature of the dilemmas, ethical and existential, that it poses for him. A substantive problem for an integrated psychology of ego development to illuminate is whether some particular problem which an individual presents is more appropriately resolved by integrating and consolidating elements within a structural level or by facilitating transition to a more complex structure. A further substantive problem is what forms of intervention, be they therapeutic or educational, and what kinds of institutional environment might be most suitable at different structural levels and for those different goals (cf. Sullivan, Grant and Grant, 1957; Cross, 1967).

The point of the present study at the most general level is to move our theories of ego development away from simple monolithic conceptions towards forms which can accommodate the complex, subtle and multifaceted nature of the individual as he faces the vital issues of his personal growth, but which can simultaneously maintain some conceptual clarity and provide useful tools to deepen our psychological understanding of his personal world.

APPENDICES

APPENDIX AMEASURE OF LOGICAL OPERATIONSTest Form

The combinations task and the correlations task were put in written format on a 14 page booklet, which was arranged as follows, but with additional space for answers:

Page 1. This test is designed to bring out the ways that you tackle problem solving. Different people use different approaches.

Put down your best answer to each question, and your reasoning, even when you're unsure or unclear about the solution. We appreciate partially correct attempts. You can use some of the space for 'working' if you want.

It's important to work through the questions in the order given, so please don't look ahead, or go back and change an earlier answer. If you just don't know how to answer a question write that down (and if possible say why) and go on. Take as long as you want, but it should not take a lot of time; don't ~~try too~~ hard.

Page 2. Suppose license plate numbers consist of four digit numbers.

How many such 4 digit license numbers could be formed using each of the first four digits (1-2-3-4) only once in each number (that is, don't repeat a digit in the same license number)?

Write them down (in columns):

How many do you have?

Sure there are no more? Check

Page 3. Did you have a system for figuring out the license numbers? What?

How many license numbers could you get with three digits? Explain how you arrive at this number.

And how many with five digits? Again, how do you know?

Can you think of a rule to figure out how many licenses you'd have with any number, 'n', of digits?

Page 4. In the following problems we'll be asking what can be said about the relationship between colour of hair and colour of eyes in various groups of people. Each problem is a new 'sample' of 'subjects' and you should treat it as a new and separate problem.

In all of the problems there are four types of people:

type A - blond hair and blue eyes

type B - blond hair and brown eyes

type C - brown hair and blue eyes

type D - brown hair and brown eyes

We give you the numbers of each type of person making up some group of people. The questions asked are logical rather than arithmetical.

Page 5. PROBLEM 1

A - blond and blue: 6 people B - blond and brown: 0 people

C - brown and blue: 0 people D - brown and brown: 6 people

a) Is there a relationship between hair colour and eye colour for this group of people?

That is to say - does a certain colour of hair go with a certain colour of eyes? Can you find the colour of someone's eyes by looking only at the colour of his or her hair (according to the figures given for this group)?

b) If you think there is a relationship -

How do you know that?

If there is not a relationship -

What would be needed for one to exist?

Can you change the numbers in each type so that there is one?

How?

c) Are there any exceptions to this relationship, or lack of relationship, in this group of people?

Page 6. PROBLEM 2

A - blond and blue: 10 people B - blond and brown: 2 people

C - brown and blue: 3 people D - brown and brown: 9 people

a) Is there a relation between hair colour and eye colour in this group?

b) If there is -

How do you know that?

Could you take some people out, to make the relation stronger?

Which people?

If there is no relation -

What would be needed for one to exist? Change the numbers so there is one.

c) Are there any exceptions, in the original group as given?

Page 7. PROBLEM 3

In the table below we've left the results blank. Can you fill in

the numbers of people of each type which would indicate a group in which there was no relationship between hair and eye colour?

(Use as many people in each category as you feel you need).

A - blond and blue: _____

B - blond and brown: _____

C - brown and blue: _____

D - brown and brown: _____

Why is there no relationship here?

Page 8. PROBLEM 4

Here are two groups of subjects, X and Y:

group X

A - blond and blue: 4 people B - blond and brown: 2 people

C - brown and blue: 2 people D - brown and brown: 4 people

group Y

A - blond and blue: 2 people B - blond and brown: 2 people

C - brown and blue: 4 people D - brown and brown: 4 people

a) In which group is there a stronger relationship between hair and eye colour?

b) How do you know?

c) If your answer is that they are the same -

Could you change the numbers so that there was a difference?

How?

And now, how much stronger is the relationship in one group than the other?

If you feel they are different -

How much stronger is the relation in one group than the other?

Could you change the numbers in any way to make the relationship stronger in one of the groups? How?

group X

- A - blond and blue: 5 people B - blond and brown: 1 person
C - brown and blue: 3 people D - brown and brown: 3 people

group Y

- A - blond and blue: 5 people B - blond and brown: 2 people
C - brown and blue: 1 person D - brown and brown: 4 people

- a) In which group is there a stronger relation between hair and eye colour? (This time we'll tell you there really is a difference).
- b) How do you know?
- c) Could you change the numbers of people in either group to make the relation stronger? How?

Page 10. PROBLEM 6

- A - blond and blue: 6 people B - blond and brown: 1 person
C - brown and blue: 5 people D - brown and brown: 4 people

- a) There is a relationship here. What is it, and how do you know this?
- b) Change the numbers to make it stronger.

Page 11. PROBLEM 6 continued

- c) In this problem 6, how many categories of people (types A,B, C,D) did you mention in your answer? (Look back and see). Did you omit any from consideration?

If you did, how about those you omitted? Thinking about it now, what did they show?

Now, how about changing the numbers to make the relationship stronger -- would you change the answer you gave in 6b?

- d) Can you say how strong the overall relationship is? How do you arrive at this?

Page 12 PROBLEM 7

group X

- A - blond and blue: 4 people B - blond and brown: 2 people
C - brown and blue: 3 people D - brown and brown: 3 people

group Y

- A - blond and blue: 3 people B - blond and brown: 4 people
C - brown and blue: 4 people D - brown and brown: 1 person

- a) In which group is there a stronger relationship between hair and eye colour? How do you know?

Page 13 PROBLEM 7 continued

- b) In this problem (7), what is the relationship in group Y?
c) How strong is it?

Page 14 PROBLEM 7 continued

- d) Still in problem 7, what do the categories B and C in group Y show about the relationship in this group?

Scoring Scheme

Combinations Problem:-

- I - No system or justification for approach; random trial and error
II- Lists, possibly searching for a system; can succeed with

4 digits using counting strategy; systems generate only a limited subset e.g. first digit constant for one subset

II/III - Attempt to develop system (initial digits constant or rotation) which is potentially general, but inconsistently or incompletely applied, and reverts to concrete counting strategies

IIIA - Discards errors and develops a consistent abstract system, but fails to generalise it correctly to any number

IIIB - Able to generalise system to any number of digits; arrives at factorial rule (at least implicitly, as demonstrated by working reasoning).

Correlation Problems:-

(Note: answers to the problems -

1. $r = 1.00$ 2. $r = .58$ 4. $r(x) = .33$. $r(y) = 0$

5. $r(x) = .25$, $r(y) = .50$ 6. $r = .25$ 7. $r(x) = .17$,
 $r(y) = -.33$)

I - Fails to reason in terms of the relationship between the attributes which underlie the 4 categories.

II - Reasons in terms of a general relationship between attributes but is unable to go beyond the concrete ratios between category frequencies to arrive at a concept of probability.

III - Shows some concept of probability, but inconsistently and resorts to concrete ratios on several (more than 2) problems.

IIIA - Reasons in terms of probability, hypothetically rather than empirically about the underlying distribution of attributes, but does not unite the diagonals.

IIIB - Able to unite categories on the diagonals (A+D) and (B+C) and reason in terms of the confirming and disconfirming cases

(on at least two problems); may have the concept of negative correlation.

Overall Assignment:-

If the classifications made by the two tasks differ then the following rules are used.

If the different stages are adjacent, subject is awarded the higher score. (This rule is used giving subjects the 'benefit of the doubt' since the written test is most likely to show error in terms of failing to elicit the highest reasoning).

If the different stages are non-adjacent subject is awarded the intermediate score. (No subjects differed by more than two stages across the tasks).

APPENDIX B'CONSCIOUS CONTENT' MEASURES'Interview' Form

The form used to obtain 'content' variables of conscious pre-occupations - derived from Cantril (1965) was arranged as follows:

All of us want certain things out of life. When you think about what really matters in your own life, what are your wishes and hopes for the future? In other words what would life look like if you are to be happy?

Such things aren't easy to put into words, but please take about 10 minutes to try and make a list of your hopes, dreams and desires. Put down whatever comes to mind. (The next page is blank to give you extra working space).

[Rest of the page blank; new page - blank; instructions continued on the next page:]

Now take the other side of the picture; what are your fears and worries about the future? In other words, if you imagine your future in the worst possible light, what would your life be like then? Again, take about 10 minutes to list your fears, worries and concerns, putting down whatever comes to mind. (Again the next page is blank).

[Rest of this page blank; new page - blank; instructions continued on the next page:]

Please go back now over the two lists you have just made, and write in the margin next to each item two things:

1. What age you feel you would like to be when this hope or fear

would be most likely to be realised, to actually come true.

2. Whether you think that control over achieving or avoiding this event rests most with you and your own efforts, or rests with circumstances which you cannot influence. (Write 'S' for self-controlled, and 'E' for externally controlled).

Content Analysis Scheme

A grouping of Cantril's (1965) categories, which are referred to by the numbers in brackets, was used to rate the content of the concerns listed:

Introspection: emotional stability and maturity (11), be a normal decent person (12), self-development or improvement (13), acceptance by others (14), achieve some of our personal worth (15), resolution of ones own religious, spiritual or ethical problems (16), lead a disciplined life (17), miscellaneous regarding own personal character (18); the negative equivalents of these.

Ideological: freedom (47), miscellaneous aspects of the political situation (48), economic stability (51), miscellaneous economic aspirations not restricted to self or family (52), social justice (55), future generations (56), social security (57), miscellaneous aspects of the social situation (58), desire to be useful to others (61). miscellaneous aspects of service, religion, or morality (62), peace (65), better world (66), miscellaneous aspects of world situation (67); the negative equivalents of these.

Other: standard of living for self or family (21), own business, land, house (23, 24, 25), modern conveniences (26),

wealth (27), good job (21), employment (22), success at work (23), health (37), happy old age (38), recreation. travel (39), happy family (41), concern for family (42), health of family (43), children (44), miscellaneous aspects of personal economic and work situation, and of self and family (28, 35, 30, 45), maintain status quo generally (69), can't think of anything (127), general miscellaneous (60); the negative equivalent of these.

Temporal perspective ratings were made on the basis of the age stated for probable realisation minus the subjects present age. This was coded into a series of categories: ongoing or anytime; 1 year; 5; 10; 15; 20; 30; 40; 50 years; death, rated as 60 years.

APPENDIX CSOME FURTHER SCHEMES OF EGO DEVELOPMENT

(1) - Intellectual and Ethical Development (Perry, 1969)

Position 1 - Basic Duality: Assumption of dualistic structure of world taken for granted unexamined. Right v. wrong, we v. others, good v. bad, what they want v. what they don't want. All problems soluble by 'Adherence': obedience, conformity to the right and what they want. Will power and work should bring congruence of action and reward. Multiplicity not perceived. Self defined primarily by membership of the right and traditional.

Position 2 - Multiplicity Pre-Legitimate: Multiplicity perceived but only as alien and unreal. As alien it assimilates easily to error and otherness. Assimilated to authority it leads to 'Opposition'. As unreal, multiplicity is a mere appearance. Opposition here sees authority not a wrong but failing in its mediational role.

Position 3 - Multiplicity Subordinate: Multiplicity perceived with some of its implications. Authority may not have the answers yet on some of it, perhaps because the relevant absolutes are not yet in view. But trust in authority is not threatened. Authority is presumed to evaluate them on skill of presentation, not on structural properties. If in opposition authority is seen to judge wrongly, and self is defined over against authority.

Position 4 - Multiplicity Correlate: Quality restructured in complex terms: right-wrong v. multiplicity. Absolutes may be doubted in multiplicity area or considered inaccessible

in foreseeable future. Multiplicity is relevant to self by being confusing, liberating, intriguing; everyone has the right to his own opinion. Or - Relativism Subordinate: Relativism perceived in multiplicity and assimilated to authority which can make judgements on the grounds of coherence and congruence, but this is still 'how they want us to think'.

Position 5 - Relativism Correlate, Competing, or Diffuse:

Relativism perceived as a way of perceiving, analysing and evaluating, intrinsically. Authority is authority in relativism. In Correlate, world is divided into areas where authority has answers, and where it does not. In Competing, relativism is a world-view but alternates with a preceding one. In Diffuse, relativism is accepted but without implications for commitment.

Position 6 - Commitment Foreseen: Relativism is accepted for all secular purposes. Commitment may be perceived as a logical necessity for action in a relativistic world, or felt as needed. The realisation may bring various reactions: eagerness, ambivalence, dismay, sturdiness, turmoil, simple acceptance.

Position 7 - Initial Commitment: First commitments or affirmations, accepting their origins in self's experience and choices; some intimations of implications.

Position 8 - Orientation in Implications of Commitment: Some implications realised, tensions between feelings of tentativeness and finality, expansion and narrowing, freedom and constraint, action and reflection. Prospect of membership with authority in area of commitment. Identity sensed in

both content and personal style of address to commitment.

Position 9 - Developing Commitments: Commitments expended or remade in new terms as growth. Balances are developing in the tensions of style, especially alternations of reflection and action. Acceptance of changes of mood and outlook within continuity of identity. Sense of being 'in' one's life.

Counter-Developmental Reactions -

Retreat: Active denial of potential legitimacy in otherness.

Variant styles are: reaction, dedicated reactionary, negativism, dogmatic rebel.

Temporising: a prolonged pause (full year) within any of the positions without evidence of entrenchment through structures of 'escape'.

Escape: a settling for positions 4, 5, or 6 by denying or rejecting their implications for growth. Variants of escape are: encapsulation and dissociation of either multiplicity or relativism.

APPENDIX C

(2) Ego Equilibria (Kegan, 1977)

[1. Impulsivity]	The construction of the "other" (that which is the object of my co-ordinating attentions) (content)	The construction of the "self" (that to which "I" am/is subject) (structure)
EGO EQUILIBRIA		
2. Monopoly	IMPULSES, PERCEPTIONS "I" no longer am my impulses (stage 1); rather "I" have impulses, and that which has them ... is ...	The new "I" who, in "having" (co-ordinating) impulses, constructs: needs, wishes, etc.-- to which it is subject--I am my needs. NEEDS, INTERESTS, WISHES, DESIRES
3. Interpersonality	NEEDS, INTERESTS, WISHES, DESIRES "I" no longer am my needs (stage 2); rather "I" have needs, desires, etc., and that which has them is ...	The new "I" who, in "having" (co-ordinating) needs, constructs: the shared context of the interpersonal, to which it is subject. I am my interpersonal relationships. THE INTERPERSONAL, MUTUALITY, SHARED SPACE
4. Institutionality	THE INTERPERSONAL, MUTUALITY, SHARED SPACE "I" no longer am my relationships (stage 3); rather "I" have relationships, and that which has them is ...	The new "I" who, in "having" (co-ordinating) inter- personal relationships, constructs: the psychic institution or self-conscious organization, to which it is subject. I am my institution. AUTHORSHIP, INSTITUTION, IDEOLOGY, IDENTITY, PSYCHIC ADMINISTRATION, SELF SYSTEM
5. Individuality	AUTHORSHIP, INSTITUTION, IDEOLOGY, SELF-SYSTEM "I" no longer am my psychic institution (stage 4); rather I have institutions, and that which has them is ...	The new "I" who, in "having" the institutional, constructs: individuality, to which it is subject. I am my individuality. INDIVIDUALITY, INTERPENETRABILITY OF SELF-SYSTEMS

[6. Complementarity]

APPENDIX C

(3) - Stages of Ego Development (Van den Daele, 1975)

		<u>Domains of Discourse</u>		
		<u>A</u>	<u>B</u>	<u>C</u>
		<u>Subjective-Directive</u>	<u>Objective-Restrictive</u>	<u>Relational-Coordivative</u>
<u>Levels of Interpretation</u>	α	α -A: Homeostatic-tropistic	α -B: Action- efficacious	α -C: Objectal- interactional
	β	β -A: Voluntaristic	β -B: Functional- attributive	β -C: Categorical- regulatory
	γ	γ -A: Preferential- hierarchical	γ -B: Pragmatic- utilitarian	γ -C: Instrumental- normative
	δ	δ -A: Individual- relativistic	δ -B: Definitional- deductive	δ -C: Consensual- valuative
	ϵ	ϵ -A: Existential- reflective	ϵ -B: Systematic- constructive	ϵ -C: Ontotelic- paradigmatic

APPENDIX D
THE INTERVIEWS

Basic Identity Interview

Introduction:

What year are you in?

Where are you from?

How did you decide to come here? Did you consider anywhere else?

What does your father do? Did he go to college?

What does your mother do? Did she go to college?

Occupation:

What are you majoring in? What do you plan to do with it?

When did you decide this? Had you ever considered anything else?

What seems attractive about that?

Most parents have some plans for their children; did yours have any plans like that?

How do your parents feel about what you're going into now?

How willing do you think you'd be to change this if something better came along?

Ideology:

Do you have any particular religious preference?

How about your parents?

Were you ever very active in your religion - belong to groups, get into discussions etc? How about now?

Are your beliefs now different from those of your parents?

How do they feel about your beliefs?

Is there any time when you've come to doubt any of your religious beliefs? When? How did it happen? How did you resolve things?

Do you have any political preferences?

How about your parents?

Have you ever taken any kind of political action - joined any groups, written letters, protested etc? Are there any issues you feel strongly about now?

Was there any particular time that you decided upon your political beliefs?

Conclusion:

Can you pick and describe two experiences that have been important in shaping your life?

What's the major conflict or problem in your life now?

Can you sum up to me 'who you are'?

Relationship to 'Knowledge' Interview (from Perry, 1970)

After the 'identity interview', introduce as: 'Some questions specifically about your experience at college'. 'Just start with whatever stands out for you about the year at college academically.'

Probes: What have you been getting out of course-work generally?

What is there to learn up here?

What do you think of the professors - what do they know that you can learn from?

Is there a basis to evaluate your work on?

How do you relate to the large number of differing viewpoints that are found in college, and the different disciplines, and theories within them?

How does what you learn up here relate to life in general?

What do you want out of university, and what are you getting out of it?

All of these probes are not used in every case. More attention is paid to 'following' the major themes and ideas of the subject as they emerge, until some sense of his epistemological structure is gained.

The Extended Identity Interview

The kind of qualitative 'clinical' research methodology involved in this in-depth semi-structured interview process has received too little detailed critical attention in psychology. We have no agreed upon rules of thumb for it. There are obvious dangers of finding one's preconceptions in an over-malleable research situation, of putting one's own ideas into the subjects' heads. The course of the interview is inevitably guided by the researcher's ongoing analysis and interpretation of the subjects' responses. One guideline is to be most suspicious of any topic or concept to the extent that it was introduced first by the interviewer. Selman and Jacquette (1977a) suggest that the only fundamental safeguard is the genuine interest of the researcher in how his subjects think.

The questions listed as the interview 'outline' need

not be asked as they are stated or in that order. They represent a set of concerns and areas to be explored, and the kind of information which the interviewer wishes to find out about. It is better if the topic is raised by the subject who is then encouraged to explore it further in the general directions suggested by the probe questions. Some of the questions seem clumsy, but are intended as a deliberate attempt to challenge the subject's ability to respond to an abstract reflection on real life concerns. Other questions are clumsy if there is no context in which to embed them. It was for this reason that the extended interview was integrated with the original identity status interview, rather than being given subsequently as a kind of reflection on what had been discussed on that previous occasion. The integrated interview simply explores the same topic areas - though not always in so much depth - as an extension of the basic topics covered in the identity status interviewing process.

Vocation

Decisive Aspects: (The conceptual and value structure employed in choosing)

- What career alternatives have you thought about?
- Have you given serious consideration to something that you finally rejected? Why?
- What do you see as the important differences between the alternatives? What aspects will you consider when you make a choice?
- What stands out as important to you when you think of

yourself as a?

- On what basis will you finally choose?
- What are the limits to the available options?
- What is possible for you?
- What doubts have you had? What conflicts or decisions did you have to resolve? How did you do that?
- What values are involved in that choice? What do you want out of a job?
- What about you is expressed by a choice of career?
- How do you know this is the right choice? Is it possible to be wrong?

Relational Aspects: (How the choice is related to oneself.)

- What is the importance of this choice for you as a person?
- What will it do for you? Do you expect a change in your sense of yourself?
- What would it be like if you didn't have it?
- Do you feel involved with it? Are you identified with it? What does that mean? Would you say you were committed to it?
- How do you feel about making this particular decision? Was it hard?
- Why do you need to decide at all?
- Was it an active choice?
- What are you risking by making it? Do you feel uncertain or secure about it?
- Is it possible to fail? How would that feel?
- Does it place any obligations on you? What kind of responsibilities do you feel it involves?
- What does it do to your sense of your personal freedom?

Promissory Aspects: (How the choice is related to others)

- What would this choice mean for the future? ✓
- Do you have a sense of direction? Do you have a plan for the future? Do you have a dream of what the future could be like?
- How does your present choice relate to that?
- How much of your life-style will this choice involve?
- Do you see this choice as permanent?
- How do you feel you will change in the future?
- How does your particular choice relate to the society you live in? Do you feel part of the wider community?
- Is it important to you to be recognized by others as a?

IdeologyDecisive Aspects:

- What seems really important about your beliefs? What is central to it? Is there something you really believe in?
- Why do you hold that view? What is it about it?
- What do you see as the alternatives to it? What's wrong with them?
- How did you arrive at that point of view? What questions in your experience does it help you answer?
- How do you know you're right? How do you justify that view?
Other people might claim (different opinion).
- In what way is it right? What does that mean?

Relational Aspects:

- What is the importance of having these beliefs for you?
What do they mean to you as a person?
- What do they give you?
- How has it changed your sense of yourself to have these views? What would it be like if you did not have them or stopped believing them?
- What matters to you most about living?
- Do you feel committed to these beliefs?
- How much of your life do they involve or affect?
- What kinds of obligations or responsibilities do they place on you? Does this affect your personal freedom?
- Should you necessarily act on the basis of your beliefs?
- How do you feel about committing yourself to these beliefs? Is it hard? Does it involve some risks? Does it cost you anything?

Promissory Aspects:

- Do you think your views may change? Is that good or bad?
- What do your beliefs have to say about the future - for yourself, and for other people?
- How do your beliefs affect your relationship to society as a whole?
- Do you think it's important to make some public statement of your beliefs?

Relationships

- Tell me something of your relationships with your friends. Who are they? What do you do together? Would you say you

were close? And open?

- And with girl-friends? Do you see someone regularly? Are you close? Open? Discuss problems? Fight?
- What is a friend? What do you get out of friendship? What does each person have to put in to make it work?
- How is that different from a lover? What is a good intimate relationship? How can people create that?
- What problems have you had to work out in relationships in the past?
- What is commitment in a personal relationship? Is it possible to choose the right or wrong person?
- How do intimate relationships change with time?

APPENDIX E

RAW DATA MATRIX

Sub- ject	Sub- Age	Identity Structure	Identity Status	W.U.S.C.	Logical Oper- ations	Moral Reason- ing	Density Intro- spection	Density Ideology	Density Self Control	Density On Going	log T max	$\frac{\Sigma \log T}{N}$
S01	21	IV	M	I4/5	3a	4(5)	.33	0	1	0	.70	.58
S02	23	III	A(F)	I4/5	3a	4(3)an	.82	0	.67	1	0	0
S03	24	III	A	I3/4	3b	4(3)	.09	0	.27	.56	1.30	.36
S04	20	III	F	I4/5	3a	4(3)an	0	.08	.38	0	1.78	.96
S05	20	IV	M	I4	2/3	4½	.90	0	.90	.20	1.30	.50
S06	21	IV	M(D)	I4/5	3b	4½	.32	.46	.39	.39	1.78	.89
S07	22	IV	M	I3/4	3b	4(5)	.46	.04	.96	.21	1.78	.67
S08	23	IV	M	I4	3a	3(4)	.56	.11	.86	.67	.70	.16
S09	18	I	F	I4	3a	3(2)	0	.07	.64	.36	1.48	.59
S10	18	I	F	I4	2	3(2)	.04	0	.57	.17	1.62	.66
S11	24	II	M	I4	3b	4(3)	.60	0	.50	0	1.30	.82
S12	24	I	A	I3/4	2	3(2)	.07	0	.86	.07	1.20	.56
S13	22	IV	A	I4	3b	5(4)	.25	.42	.83	.25	1.78	.94
S14	22	IV	M	I4	3b	4(5)	.92	0	.92	0	1.26	1.05
S15	23	II	A	I4	3b	4 an	.50	0	1	.17	1.43	.85
S16	24	III	A	I4	2/3	3	.11	.22	.77	.15	1.78	.92
S17	19	III	D	I3/4	2	3(4)	.28	.28	.43	.28	1.70	.84
S18	19	I	F	I3/4	2	3	0	.13	.54	.60	1.60	.44
S19	18	I	M	I3/4	2/3	3(4)	.13	.68	.41	0	1.15	.88
S20	18	I	M	I4	2	3(2)	.20	.18	.47	.17	1.20	.90
S21	18	III	F	I4/5	3a	3(4)	.53	.12	.29	1	0	0

APPENDIX E (continued)

Sub- ject	Age	Identity Structure	Identity Status	W.U.S.C.	Logical Oper- ations	Moral Reason- ing	Density Intro- spection	Density Ideology	Density Self Control	Density On Going	log T max	$\Sigma \log T$ N
S22	19	II	M	I3/4	2/3	3(2)	.17	0	1	0	.70	.70
S23	19	II	F	I3/4	2	3	.20	.13	.40	.07	1.78	1.01
S24	20	I	F	I4	2/3	3(4)	.30	0	.20	0	1.30	.65
S25	18	I	F	I4	2/3	3(4)	0	0	.80	0	1.08	.90
S26	19	I	D	I4	3a	3(2)	0	.20	0	0	0	0
S27	20	II	D	I3/4	2/3	3(4)	.45	.05	.79	.45	1.78	.63
S28	22	III	A(D)	I4	2/3	3(4)	.20	.15	.60	.60	1.70	.47
S29	23	IV	A	I4	2	3	.65	.08	.52	.26	1.48	.47
S30	23	III	A(D)	I4	3b	5(4)an	.48	.13	.78	.22	1.67	.90
S31	19	II	F	I4	3b	4(3)	.26	.04	.70	.48	1.78	.42
S32	22	II	D(M)	I4	2/3	4(3)	.28	0	.60	.25	1.48	.69
S33	21	II	F	I4/5	2/3	4(3)	.13	.13	.39	.20	1.78	.68
S34	20	I	D	I3/4	2	3	0	.21	.50	.14	1.0	.63
S35	22	I	D	I3/4	3a	2(3)an	.22	.03	.57	.44	1.78	.67
S36	22	IV	A(M)	I5	2/3	5(4)	.78	0	1	1	0	0
S37	23	III	D(M)	I4	3a	4(3)	.40	0	.40	.50	1	.38
S38	24	IV	D	I4	3a	4(3)	.75	0	.25	.56	1.70	.85
S39	23	II	D(M)	I4	3a	3(4)	.62	0	1	.77	1.78	1.16
S40	20	II	A(M)	I3/4	2	3	.33	.25	.42	0	1.78	1.47
S41	18	II	F	I4/5	3a	3	.32	0	.66	.21	1.40	.90
S42	19	II	A	I4	3a	3(4)	.22	0	.56	.11	1.40	.57

APPENDIX E (continued)

Sub- ject	Age	Identity Structure	Identity Status	W.U.S.C.	Logical Oper- ations	Moral Reason- ing	Density Intro- spection	Density Ideology	Density Self Control	Density On Going	log T max	$\frac{\Sigma \log T}{N}$
S43	23	IV	A	I4	3a	4(5)	.40	.10	.60	.05	1.78	.94
S44	22	IV	A	A/3	3b	4(3)	.30	.10	.48	1	0	0
S45	21	I	F	I4	2	3(4)	.30	0	.29	.30	1.78	.88
S46	18	II	F	I4	3a	3(4)	.13	.13	.83	0	1	1.0
S47	20	III	M	I3/4	2	3	.42	.08	1	0	1.0	.82
S48	18	III	M	I4	2	3(4)	.21	.56	0	.50	0	0
S49	22	IV	A	I5	3a	5(4)	.44	.03	.83	.22	1.70	.74

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