THE FAMILY AND MENTAL DISORDER: AN INCOMPLETE ESSAY

JOHN H. CUMMING, M.D.

HIS article does not pretend to summarize the vast amount of literature on the family and mental illness; and it completely disregards the largest single type of study: the family influences on the growing child as reported in case studies dealing with the psychodynamics of illness. Whatever their clinical value such studies contribute little to our scientific knowledge.

Because I believe that it is ineffectual to consider a subject apart from some theoretical approach to it, I have attempted to summarize a theoretical position about the family and to derive from this a series of categories of studies of the family.

Using the index case as a point of reference I have explored the different forms which the family takes as the index case moves through his life cycle. This approach is recommended by Lansing and Kish (30) who state "Advantages of family life cycle (as an independent variable) over age probably can be shown for many economic, social, political, and psychological variables. . . ."

I will set forth the theoretical functions of the family unit for its various members and try to discern which of these functions is being studied in various researches. Finally I will try to separate studies which deal mainly with the function of the family unit from those which deal with actual changes in its usual structure. The typology of family studies which these distinctions yield is heuristic because it not only divides up those studies currently in the literature but also points up those areas of research which are being neglected. Some of these areas seem to be promising for epidemiological research.

Family Theory and Categories of Studies

Most of the work which attempts to relate various aspects of

family structure and function to the occurrence of mental illness lacks any systematic definition of what is meant by a family. Researchers often use the word "family" in several different ways although this is seldom explicitly set forth.

Some refer to what is called the "family of orientation": the family unit into which the index member was born and which is responsible for his socialization. Others to the "family of procreation": the family which the index member forms by marriage and in which he will in turn raise his own children.

A third "family state" should also be distinguished because of its theoretical utility. This is the state of familial limbo or non-family which typically occurs between the time when the index member has broken most of his ties with his family of orientation and has not yet married and formed his own family of procreation. A similar state of familial limbo can be arrived at after the formation of the family of procreation through divorce, separation, or the death of a spouse.

As conceived here, families of orientation and procreation are all nuclear families, that is they contain at most two generations and have conjugal, parent-child and sibling relationships only within them. We will also, however, have to consider the extended family which is formed either by the addition of a third generation to the nuclear family group or by lateral extension, that is, the addition of more distantly related kin such as the uncles, aunts, grandparents, or cousins. In our society this probably occurs most commonly when a widowed parent goes to live with the family of procreation of his adult child. The implications of this type of family extension will be developed as we progress.

The American Family has undergone considerable change since the beginning of the present century. Many of the functions of the family have been taken over by other institutions in the society. This has been taken by some observers to mean that the family as an institution is disintegrating. Parsons (39), however, observes that not only is the family becoming a more popular state, that is, a greater percentage of people are mar-

ried at any given time, but it also retains two vitally important functions:

We therefore suggest that the basic and irreducible functions are two: first, the primary socialization of children so that they can truly become members of the society into which they have been born; second, the stabilization of the adult personalities of the population of the society. . . . it is the control of the residua of the process of socialization which constitutes the primary focus of the problem of stabilization of the adult personality.

These two functions suggest further ways of categorizing studies of the family. Thus one category includes studies which focus on defects in the process of socialization. Such defects result in an imperfect internalization of the norms of society and a resulting tendency to deviant behavior. Another class of studies is implicitly or explicitly concerned with the stabilizing and controlling effect of family life on the adult individual and the causes of breakdown of this function. We might say, vis-avis mental illness, that the socialization studies concern themselves with the etiology of, or the formation of, a predisposition to mental illness while the studies of stabilization and control concern themselves with the precipitation of illness, with the process of hospitalization, and with readjustment subsequent to an episode of mental illness.

Parsonian theories of the family can be set forth in two ways: first, with an emphasis on the structure of the social group and second, with emphasis on its functioning. Structurally, it is obvious that the family is a small group and shares the general characteristics of such groups. The family, however, has certain structural qualities which set it apart from other small groups. Part of the difference stems from its function of socialization. This function, by definition, means that the family must teach its younger members not only the values of its own sub-system but also the values of the larger society. It must also, like other socializing institutions, be resigned to expelling its members when their socialization reaches an adequate level.

For the family best to accomplish its socializing function it is necessary to have the larger society "represented" in family interaction. The older members of the family, particularly the father, have roles in the larger society and in the ideal state they should represent these societal roles in the family setting. If the father does not adequately represent his occupational role in the family, the family will probably be insufficiently connected with the larger group and will tend to take on the qualities of a self-contained system, rather than retaining the characteristics of a sub-system of a larger organization. Such a change toward system functioning will have at least two consequences. First, the family will tend, like all system groups, to retain its members and try and gain primacy for its values over the more general values of society. Secondly, because of its exclusive nature, this family will discourage peer group relations for its children and will leave them inadequately prepared to form new group relationships outside of the family.

A situation where the father did not play such a representative role might occur if he were inadequate in his occupational role, or in some way clearly deviant and rejected by his associates in the larger society, or clearly dominated by an instrumentally oriented wife within the family. The consequences of such a failure on the part of the father or the family unit—that is in the family unit's subsequent retention of children and its exclusive attitudes—will be seen to have special importance when we consider power relationships within the family.

Such considerations are important in thinking about work such as that of Lidz (31, 32), since they explain why the affected member may have been held so long in a deviant family group. It might also allow us to generate some hypotheses to explain why some sorts of deviance on the part of parents seem to be damaging to children while others are not.

While the family is a sub-system, it is as Henry (26) pointed out in an early work, a system of interrelated groups in itself. The groups might be two-person groups such as husband-wife, mother-child, sib-sib as well as three and four-person groups depending on size of the family. The number of possible groups goes up rapidly with increasing family size. Family size may indeed be an important theoretical variable in socialization studies because of the difference in the number of differentiated experiences which can be found within the confines of the family. Of the sub-systems of the family only the mother-child constellation has been subjected to any considerable amount of research. Recently, however, Henry, Spiegel (43, 44), Bowen (8) and Lidz, to mention only a few, have attempted either to see the family as an operating whole or else to view it as a system of sub-systems each of which merits attention.

The various sub-groups which form within a family differ from one another, however. This is because the family is by its nature a differentiated system, that is, the people in it are not only of different ages and sexes but have different, though complementary, roles. All families are divided along two great axes. Because of the generational differences which exist in any family and because of the prolonged state of helplessness of the human infant, it is obvious that the father and mother can be designated as having more power than the children. A second axis of role differentiation corresponds with sex categories. The male members play predominantly instrumental roles, that is, they provide for the families' needs in a practical way and relate the family to the surrounding community. They represent the family as it strives to achieve its goals, and defend it from any threat from outside. The women of the family play predominantly socio-emotional roles and are primarily responsible for dealing with the tensions which arise within the family, and thus with defending the system against internal threats to its integrity. These two axes, taken together, yield four descriptions of the roles within the family. They give us the dominant role characteristics of the father, instrumental and powerful; the mother, powerful and socio-emotional; the son, less powerful and instrumental; and the daughter, less powerful and socioemotional. According to this scheme, important disruptions in

family functioning would occur if one or another member did not fulfill his or her appropriate function, or if competition for roles arose between family members.

Such are some of the very general structural considerations which seem to be of importance for the functioning of the family as we know it. There are other ways, of course, of viewing the functioning of the family in its socialization task. Perhaps the best known and most used is the Freudian concept of stages of development, both in its original form and as modified by Erikson (15). A more interactive sociological model can be derived from Sullivan (50) or George Herbert Mead (35). Piaget (40) furnishes us with brilliant empirical descriptions of the development of the thinking of young children. Parsons, in the work which we have been reviewing, presents a sociological equivalent of the Freudian phases in which he sees the stages of development as a series of splits in the types of roles which the child experiences and internalizes. In the earliest phase of development, during "oral dependency," he sees the mother and child as an identity. As this phase moves into anality, the mother and child begin to interact as separate individuals and by the time of the Oedipal phase these two roles have divided into the four whose structural aspects were described above. The next discrimination made by the child is between roles which are typical of the family and therefore are particularistic, in Parsons' terms, and those characteristic of the wider non-familial world which are governed by universalistic criteria. Finally, in the phase of adolescence, the individual learns to distinguish between those roles which demand from the role holder inherent attributes, or quality, and those roles characterized by what the role holder has accomplished or by his performance. Parsons claims that at his high level of generalization the ability to act in, and distinguish among, these differentiated roles constitutes adulthood. The Parsonian view of the functioning of the family is neither particularly easy to grasp, nor, to those schooled in the more colorful psychoanalytic theories, very appealing. It does have, however, the great advantage of being conceptually

related to his idea of family structure. As we review the extant research into the connection between the family and the occurrence of mental illness, we will come to see how important this sort of relationship is. For the moment, however, it is sufficient to realize that it will be useful further to attempt to classify researches into those concerned primarily with the functioning of the family, and those concerned primarily with its structure.

We will now consider some of the studies in the family. To some extent we will use the theory we have just outlined as a base line for our criticisms and for suggesting areas for further research. Further, the conceptual scheme which we have outlined allows us to make a categorization of studies which we hope will be heuristic. By naming the types of family situations which an index case may experience as he passes through his life cycle and dividing each one of these phases, first, by the primacy of the family function which is being studied and, second, by the approach that is being used, we would arrive at a series of categories as shown in Table 1. It should be noted that this categorization is not exhaustive, for instance the difference in the nuclear family condition as opposed to the extended family condition is considered only for the family of procreation. Similarly, separate sections in the text are set up for each cell only for the family of orientation, since the quantity of research in some of these areas has been small. I have tried throughout, however, to organize the paper according to these principles.

Table 1.

	Socialization		Stabilization-Control	
	Function	Structure	Function	Structure
Family of Orientation Familial Limbo-State Family of Procreation Familial Limbo-State Extended Family of Procreation	Section I Consid	Section II Section IV Section V Section IV ered with Section IV Section VI		on III

SECTION I

FAMILY OF ORIENTATION. SOCIALIZATION: FUNCTION

The overwhelming majority of all studies of the family have used the child or young adult as the index case. They consider the child in relation to his parents and are concerned with the formation of the adult personality rather than with stabilization-control or tension management. Further, they are studies of the process involved rather than studies of the effects which changes in the form of the family might have on these processes.

Unfortunately, almost all of these studies are unsatisfactory. Spiegel and Bell (45) in reviewing 85 such studies point out that only 17 of the total group employ control groups. Seventy of their group of studies (they selected only the largest of the hundreds available) were "clinical" rather than "objective." The "objective" studies, which were also by-and-large the group who used controls, have tended to contradict the findings of the clinical studies. Stevenson (49), in a paper in which he examines the assumption implicit in many of these studies—namely that the child is more plastic and subject to influence than the adult-points up the studies by Orlansky (38), Thurston and Mussen (52), and Sewell (42) which indicate that we cannot accept the idea that child training and early life experience have specific effects on adult personality. Thorne (51), on the other hand, by following the genealogy of two families through four generations, makes an excellent case for the thesis that some behavior patterns are learned, in this case patterns of hostile aggressive behavior.

Many of these studies are investigations into the family background of schizophrenics. The index case in these studies is often a young male schizophrenic and the focus has been the relationship of this person with his living parents. Usually the patient has been living at home at the time of hospitalization. As a matter of fact we suspect that the young male schizophrenic living in his family of orientation at the time of admission to hospital is not the modal case. While this does not pre-

vent these studies from contributing to knowledge about the etiology of schizophrenia, it does diminish their usefulness in determining the precipitating factor in the acute illness or the forces involved in hospitalization. Lest I be accused of setting up a straw man, let me hasten to say that almost all of these studies do focus on etiology. Since functional studies are difficult and time consuming, it is almost impossible to study a group large enough for adequate statistical analysis. The two largest of these studies, those of Lidz and Spiegel, have study groups of fifty and eighteen cases respectively. Bowen, Bateson (5) and Wynne (55) have made studies which all fall short of these numbers. Spiegel's research is the only one in which controls are used. However, while the remainder of the researches are concerned with schizophrenia, Spiegel deals with children at a child guidance clinic, suffering mainly from neurotic disorders. Thus we have no controlled functional studies of schizophrenia and our judgment of the usefulness of all of these family studies is limited by the fact that we can only compare the families of schizophrenics with those of our own and those of our friends.

The cheering (and from the point of view of the statistician, the dubious) feature of these studies is their claimed ability to turn up universals. Bowen, for instance, finds what he terms "emotional divorce" uniformly present in the families of his schizophrenics. The father and mother maintain a "striking emotional distance" from each other. Coupled with this, he notes an inadequate-overadequate reciprocity which arises from immaturity on both their parts. This pattern is also observed by Vogel working on Spiegel's families of neurotic children. He has called the process "polarization" and believes that the parents have similar neurotic conflicts marked by ambivalence, and in their interaction each tends to support one side of the ambivalence. A move of either from his position will bring about a shift in the other to restore balance. In Bowen's, Wynne's and Spiegel's cases, the families are often described as having a superficial and spurious agreement about their problem areas.

The similarity of Spiegel's findings with those of the remainder of this group is somewhat distressing. If the family backgrounds of neurotic children and young schizophrenics are so similar then we may have to assume that such conditions are necessary but not sufficient causes. Roberts and Myers (41) contribute to a solution of this difficulty by comparing the background of two groups of schizophrenics and neurotics. The groups were different in their classes of origin but each contained equal numbers of the two diagnostic categories. Their investigation allows them to specify not only the kind of stress but the quantity of such stress in the background of each case. They claim that while the backgrounds of their schizophrenic and neurotic cases were similar, the schizophrenics had consistently a larger amount of stress in their background. Throughout this book schizophrenia is treated as if it were a bad case of neurosis. While this interpretation may be consistent with the regression theory of schizophrenia, it is inconsistent with the more recent theories of this illness stemming from the ego-psychology of Federn (17) and others.

Roberts and Myers' book is disappointing to those of us who eagerly awaited its printing. The authors use very little general theory and for the most part are content to use psychoanalytic constructs to explain their findings. Their data are not presented in a form which makes it possible for the reader to rework them if he wishes to do so. Finally, there seem to be methodological errors. An interesting portion of the book rests on a comparison of the social mobility patterns of two groups of patients from Social Class III and Social Class V respectively. Many of the Class III patients had parents who were in a lower social class, Class IV. On the other hand, Class V patients who come from the lowest social class could not by definition have parents who were lower in their social position than the patients. It would seem probable that the psychological impact of mobility patterns would differ between these two groups not only because of their class backgrounds and their illnesses but also because of their family mobility histories. In this latter important area the two groups do not seem to be comparable.

Lidz's work deserves special mention because of its monumental proportions. It is a great pity that he did not control his large sample. His results, however, are so striking that they command attention. He claims that in every case of schizophrenia studied there was one parent who was an unhospitalized psychotic or very seriously neurotic. It is his thesis that the psychotic symptomatology is learned from this parent. Unfortunately, we cannot be sure that this result does not come from his sample selection.

All the authors which we have mentioned have offered plausible formulations of the familiar origins of mental illness. Further, all of these studies have similarities and their findings tend to support one another. None of them would satisfy an epidemiologist, however.

SECTION II

FAMILY OF ORIENTATION. SOCIALIZATION: STRUCTURE

Work on maternal deprivation seems to fall naturally into this class of studies. When the structure of the family has been disturbed in such a way as to make the mother unavailable to the child, dramatic signs of pathology are said to ensue. Bowlby (9), Spitz (47, 48) and Bender (7) have all written extensively about maternal deprivation, with Bowlby's work remaining the most comprehensive. There is an assumption in most of these cases, probably correct, that the etiologic trauma is the separation of mother and child and not some other stress in the total situation. It is this assumption which has allowed various workers to group studies of hospitalization of children, death of the

¹ Since the writing of this section two important references have come to my attention. Barbara Wootton in her excellent book, Social Science and Social Pathology, MacMillan, New York, 1959, has a chapter entitled "Theories of the Effects of Maternal Separation or Deprivation." This critical analysis of the literature on Maternal Deprivation presents my point of view better than I can hope to. Secondly, the work of Harriet Rheingold as published in Monographs of the Society for Research in Child Development Inc., Vol. XXI, No. 2, 1956, Child Development 1959, 30, and the Journal of Comparative and Physiological Psychology, Vol. 52, No. 1, 1959, seems to offer a fresh new approach to this problem, an approach which has a chance of producing a real advance in knowledge.

mother, and effects of mother working, under a single rubric. From our point of view, it seems better to consider those cases in which the child is removed early from the entire family (an early case of familial limbo) separately from those cases in which the child has been left within the family and the family disrupted by the death or desertion of the mother. From a structural point of view, while it seems probable that a substitute mother role might be provided in the family setting, it would be difficult to provide it in a situation such as an orphanage, where the father role—a necessary support to the mother role—is lacking.

I will not even attempt to summarize the findings of these studies. I will, however, quote from a recent as yet unpublished manuscript² to illustrate the magnitude of the claims which are being made.

When the symbiotic relationship between a child and his mother from six months to three years is disrupted for more than a day, typical physical symptoms develop: insomnia, lack of appetite, weight loss, predilection to intercurrent infections, retardation of physical growth, backwardness in talking, restricted activities with the child sitting and lying inert in a dazed stupor. Emotionally, the child is depressed, apprehensive, sad, and withdrawn. He rejects the environment and makes no attempt to contact strangers. He is at first acutely and inconsolably distressed for days, a week or longer without a break. He shows agitated despair with screaming and moaning. He refuses food and comfort. Only exhaustion brings sleep. After days, he becomes quieter and may lapse into apathy. He may regress to infantile modes of behavior, i.e., wetting, soiling, masturbation, refusal to talk and to walk. Intellectually, the longer the child is separated, the lower his developmental Quotient falls. This seems to be a consistent finding in all countries. Socially, his limpet-like attachment to his mother is such that only if she is with him or nearby can he manage his environment and himself. All effort at "separation in slow stages" is in vain. How is

² Prepared by Dr. Mary Mercer for the Subcommittee on Primary Prevention Committee on Mental Health, Technical Development Board, American Public Health Association.

it possible to reconcile him to the loss of that vital part of himself, his mother?

These statements are made by-and-large on the basis of the group of studies which have been so well summarized by Bowlby. These studies command attention not so much because of their excellence in design (on the contrary, many of them have obvious flaws) but from the consistency of direction of their results.

In distinction to the studies which claim massive and irreparable damage resulting from loss of the mother, one has to contrast the extreme cases described by Kingsley Davis (13) in which recovery was remarkably quick and complete after a long period of extreme isolation. We should also consider the results of different methods of child raising.

Spiro (46), in a study of one Israeli kibbutz, reports that the education and socialization of the kibbutz children is the function of their nurses and teachers, and not of their parents. Infants are placed in infants' homes upon the mothers' return from hospital where they remain in the care of nurses. Both parents see the infant in the nursery, the mother when she feeds the infant, the father upon his return from work. The infant is not taken to its parents' room until its sixth month, after which it remains with them for an hour. As the child grows older, the amount of time he spends with parents increases and he may go to their room whenever he chooses. Usually the amount of time spent with them is a two hour period at the end of each day and a longer period on the Sabbath.

It seems to be safer at present to assume that what these studies indicate is that children who are raised in institutions develop differently from those who are raised in nuclear families. The precise nature of the difference can be accounted for by the nature of the individual institution.

It may not be out of place here to enter a plea for a more precise definition of terms in these studies. Ainsworth and Bowlby have attacked this problem in their excellent monograph, "Research Strategy in the Study of Mother-Child Separation" (3). However, there still is in many studies a confusion between the results of actual enforced physical separation, with its consequent cessation of interaction, and temperamental or emotional distance between people. Thus Kohn and Clausen (27) in speaking of isolation and schizophrenia treat isolation as if it were lack of sociability. They find that this variable is no more strongly related to schizophrenia than it is to manicdepressive psychosis. In a further study of shyness and withdrawal, Michael (36) in an impressive long-term follow-up study of children who were seen at a child guidance clinic points out that introverts have a lower than expected incidence of schizophrenia in adult life. In studying the family, however, we should be careful that we do not confuse conceptual entities, such as Bowen's "emotional divorce" which is a description of impaired family function, with actual family disruption which is a structural change.

The more obvious aspects of family structure as it relates to mental illness, such as the ordinal position of the child in the family, or family size, have been unpopular as research problems in recent years. Malzberg (33) apparently convinced us that ordinal position did not influence the rates of hospitalization. Myers and Roberts have recently challenged this view, but I am not convinced that their methods are as useful as that of Malzberg in his earlier studies. Wahl (53), in a study of the background of 583 cases in the United States Navy, reported that schizophrenics came much more often from large families. However, it seems obvious that he had neglected to consider that large families present a larger group to the risk of schizophrenia. When corrected for family size, his differences seem to disappear.

Wahl also presented evidence that in his sample there was a high incidence of the loss of a parent by death before the patient attained his fifteenth birthday. He reviews a number of other papers which, in the main, support these findings. On the other hand, it is obvious that only a small number of persons who suffer the loss of a parent are hospitalized for mental illness. It i.

ĺ.

ini

N

ا د د

7

would be of great interest to know, in structural terms, if the schizophrenics in Wahl's sample came from homes where the role of the missing parent had not been filled by some other person. Gerard and Siegel present data which might be construed as casting doubt on Wahl's findings. However, since they had a high loss from their sample because of inability to locate reliable informants—in most cases fathers and mothers of the patients—one may legitimately suspect that broken homes were under-represented in their sample.

The Gerard and Siegel (21) study almost bridges the category of structural and functional studies. Their variables might be referred to as "family traits." They find their sample of urban male schizophrenics characterized by a markedly heightened relationship with mothers. The mother was usually a clearly dominant person in the household and the fathers were disinterested or absent. This mother dominance distinguished these families from a group of controls. The mothers of the schizophrenic males had markedly overprotective attitudes and the schizophrenics were more often spoiled and pampered than were the controls. Many more schizophrenics than controls lived in neighborhoods in which their families were markedly different either ethnically, economically, or religiously from their neighbors. However, differences in the toilet training and breast feeding of the schizophrenics were in the direction opposite to that usually postulated. The schizophrenics were breast fed longer than the controls and the toilet training of the two groups did not appear to differ. The authors used as controls the members of a graduating class in a local high school. Serious objections can be raised to this control group. Despite this, the study is one of the more adequate ones in this field and deserves attention.

Kohn and Clausen (28) whose work merits attention by virtue of its close attention to the requirements of method have pointed out that parental authority behavior varies more between social classes than it does between the parents of schizophrenic patients and others.

SECTION III

FAMILY OF ORIENTATION. STABILIZATION-CONTROL: STRUCTURAL AND FUNCTIONAL STUDIES

Structural and functional studies of the stabilization and control aspects of the family of orientation are almost non-existent. Some aspects of general studies of child raising touch on these points but without any conceptual separation of them from the problems of socialization. This is undoubtedly a reflection of our current interest in child raising and of our childcentered culture. It is inconceivable that neglect of this area of research could have taken place fifty years ago when a different view of children existed. One crucial area for study suggests itself. If the family of orientation is unduly⁸ prolonged in time, certain problems inherent in family structure and in our society manifest themselves, particularly in relation to the male members. We have already pointed out that there is an important power differential between the generations of the nuclear family. In the father's case this power is derived by-andlarge from the prestige attached to the occupational role which he plays in the community and which he represents within the family. In our North American society there is a strong pressure for young men to demonstrate that they can get and hold jobs. This is a value even in those situations where it is not economically necessary for them to work. On the other hand, once the male child takes a job he, as well as his father, represent occupational roles within the family. Consequently the power gap between father and son is abruptly narrowed. Such a shift in relationship often results in stress and dissension. The stabilization and control function of the family for the son will automatically be lessened.

In discussion of theory I pointed out that the family must remain a sub-system of the total society. If it takes on too many of the aspects of a self-contained system, it tends to retain its

⁸ Objection has been raised to the word "unduly." We use it to imply that in this culture there is probably an optimal amount of time which should be spent in the family of orientation.

1

ľ

i.

ļ.,

ir.

15

11

. . .

members unduly long and to prepare them inadequately for membership in alternative groups. Further, I pointed out that families are likely to become self-contained systems when the oldest male member—who is the main connecting link with the community—plays his representative role inadequately. When there is such an instrumentally inadequate father there is an enhanced chance of conflict when the son takes a job and becomes fully instrumental. Thus the male child as he matures in such a setting is in a true dilemma. If he stays home, the family fails him in its stabilization and control functions. If he leaves home, his social inadequacy makes it harder for him to form new group relationships thereby replacing the family with a functional equivalent. He is likely to remain an isolate and thus still be in a position of inadequate stabilization and control. These speculations lead us directly into a discussion of the Familial Limbo-State.

SECTION IV

THE FAMILIAL LIMBO-STATE

While this state is not often thought of as a variant of the family, some researches bear upon it. Malzberg (34) laid a firm basis for these in his studies of married and single states related to the incidence of various mental illness (hospital admissions). He says, "The evidence seems clear that the married population had, in general, much lower rates of mental disease than any of the other marital groups." Like several of the predecessors whom he quotes, he is inclined to attribute the high rates of mental illness among single people to a sort of low vitality which is at once a cause for the failure to marry and for the predisposition toward mental illness. He admits, however, that another explanation for the high rate of illness among the widowed is needed, since it cannot be assumed that they too lack "mental vigor." While not disputing Malzberg's findings, it seems that we should be able to find hypotheses both more theoretically sophisticated and more empirically testable than the above.

Adler (2), using another population, addressed herself to the question of whether marriage protects against illness or whether the prodromal signs of illness prevent marriage. Computing rates for various marital status groups at the estimated time of onset of illness, she concludes that the married have lower rates of psychosis even when computed on the basis of the marital status before the onset of the mental illness. However there did seem to be evidence that among the single some had not married owing to the prodromal symptoms of mental illness.

Adler further reports that while marriage does not appear to result in a higher recovery *rate*, her evidence shows that at follow-up the married had higher recovery level scores than the single. She points out, however, that this may have been caused by the marriage of certain patients after they left hospital. The living arrangements of the single patients are not specified.

Some of the studies of isolation are relevant to our consideration of the non-familial limbo-states. Faris first suggested that isolation had a causal connection with mental illness. He and Dunham in their studies of the ecology of the hospitalized mentally ill from Chicago (16) found especially high rates in the so-called zone of transition, the area of cheap hotels and rooming houses close to the center of the City. They felt that the high degree of isolation which they assumed to be associated with living in such areas was the causal factor most closely associated with the high rates of illness, particularly schizophrenia. Gerard and Houston (20), in an investigation of 305 male first admissions from the city of Worcester, Massachusetts, confirmed that there was a high negative correlation between a "favorability of living index" of an area and rates of first admissions for schizophrenia, but found that this difference was caused by the relatively large numbers of single, separated, and divorced men living alone in these unfavorable areas. Since these solitary males showed high geographical mobility it was assumed that they had drifted down into the zone of transition. However, since Gerard and Houston did not have a residential history for this particular group, there was no evidence that

ię.

nic.

D

űŢ

Ot :

Į.

ŀ.

10

al.

S:

ie

i.

either these men had moved down from better areas rather than simply moving frequently within the area and, further, that the movement was greater than that among solitary men unaffected with schizophrenia. The "drift hypothesis" was questioned further by Roberts and Myers (41) startling finding that the majority of schizophrenics are upwardly mobile from their families of orientation—in fact more upwardly mobile than their siblings.

Hare (24, 25) attempted to replicate Gerard's study on a large English population, the city of Bristol. In his work it is clear that, of the various criteria which he used to rank his city areas, the percentage of single-unit dwellings gives the best prediction of the rate of schizophrenia. Rates were high in both central slum areas and central middle-class areas. What these areas had in common was a large number of people living alone. Furthermore, the admission rates for schizophrenics who were living away from their families were highest from these areas. Unfortunately, the fact that a person is living away from his family does not necessarily mean that he was living alone. Hare's studies demonstrate a great need for determining rates specific to the populations at risk in various kinds of living situations. Not only must living alone and living with others (nonfamily) be analyzed separately, but the parental and conjugal living situation need to be dealt with separately.

Hare also investigated a small group of people living away from their families and concluded that about half of them—they seem from their description to be paranoid—had left the family because they could not get along in it. This did not mean that they were inadequate or downwardly mobile. They moved into central districts because that was the district of single-unit housing. While Hare feels that poverty is not a particularly strong factor, it seems to me that an estimate of the population at risk made from his figures suggests that among that group who live away from their families there is a much higher incidence in the poorer areas than in the middle-class areas. Both rates, however, are higher than those who live in a family set-

ting. Hardt (23) in a careful investigation of a New York State population confirmed Hare's general thesis and further demonstrated that the differences are not due to the age distribution of the populations within particular census tracts. This is an important variable to control in such studies.

SECTION V

THE FAMILY OF PROCREATION. SOME ASPECTS OF STABILIZATION, SOCIALIZATION, STRUCTURE AND FUNCTION

So little has the family of procreation been studied that we will consider all of these categories together. Several authors (Erikson (15), Parsons, Spiegel and especially Naegele (37)) have pointed out that the raising of children has a socializing effect upon the parents. It is popularly recognized that there are stages in the family of procreation: there are "newly-weds," "the young family" and finally, "the empty nest." Divorce rates are known to be related to the duration of marriage, reaching their highest point in the third year of marriage (54) and divorce diminishes in frequency with the number of children (4). However, I know of no one who has attempted to study duration of marriage and number of children in relation to the incidence of mental illness. While the loss of a parent is supposed to be important in the psychic economy of a child, and the consequences of the lack of a same-sex role model is often commented upon, there exist few studies of the change of role which occurs in one parent when the other one dies. That the effective instrumentality of the adult male role depends on the socio-emotional stability provided by the female role is assumed, and the reverse is to some extent recognized, but any precise study of this reciprocity of roles is lacking. I expect that when someone does study the role of the surviving spouse, it will be in the interests of determining the effect of these changes on the child. Such is the strength of the implicit belief that nothing very important happens in socialization after the seventh year.

As Parsons points out, the socio-emotional outlet provided by children has a stabilizing effect on the adult members of the n pi

dĿ

XC.

ı.

ľ

ÐE

1

family. Again, virtually no studies have been made of the mechanisms whereby the stabilizing effects of family life are maximized and what sorts of circumstances can interfere with this function. Bowen's concept of emotional divorce is perhaps relevant, but the naming of a phenomenon does not explain either its genesis or its operation. What is the difference, for example, between a family which is filled with strife but can exist for years without emotional divorce and one in which strife results in this phenomenon?

There are two very important series of studies which deal with the post-hospital adjustment of the mentally ill and where the result of living with the family of procreation is compared with other living arrangements. The first of these is reported in a series of papers by Freeman and Simmons, the second is the work of Carstairs and Brown.

Freeman and Simmons (18, 19) started their investigation of a cohort of male functional psychotics discharged to the Boston area with the hypothesis that the paternal family would be more tolerant of deviance than the conjugal family. Thus, they expected that they would find (since a period of time had elapsed between the discharge of their cohort and the evaluation) that there would be more patients with a poor social and occupational adjustment living with their families of orientation than with their families of procreation. This, indeed, turned out to be the fact. They also allude to the fact that more patients had been returned to hospital from their conjugal families but they do not specify if this plurality is sufficient to account for the difference. Rate of return to hospital for those who went to parental and those who went to conjugal families was roughly equal (12). They further illustrated that patients seem to have a low level of adjustment when the female members of the household are rigid and punitive. In their families of orientation, the former patient is found to be socially and occupationally inadequate only when other adequate members were found in the household. Thus, while Freeman and Simmons demonstrate the greater tolerance of the family of orientation, there are some indications that the behavior which the family is called upon to tolerate may be an acceptance by the former mentally ill person of the only role available to him. This possibility is considered by the authors (12) but evidently finds less favor with them than their tolerance hypothesis.

Brown (10) in a meticulous study reports similar findings but is able to extend them to demonstrate the active rather than the passive significance of the environment. He studied a group of chronic male schizophrenic patients (the criterion of chronicity being two years in hospital before discharge) and found that those who lived with siblings or in lodging houses after discharge succeeded much more often in remaining out of hospital than those who lived in hostels or in their families of orientation and procreation. In his findings one can see the same trends as Simmons and Freeman's report. Brown also found that more schizophrenics fail when returned to their wives than when they are returned from hospital to their mothers. But he finds that both of these environments are inferior therapeutically to the relatively neutral environments of living with siblings and living in boarding houses. Brown searched for factors present in the patients at the time of discharge but was not able to find any to account for the trend. He supports the often voiced opinion that families of orientation take patients from hospital who are not as fully recovered as those who are discharged to other settings but he is able to control this variable in his further analysis. Finally, he produces a number of very telling findings. Not only do sons in the family of orientation remain better integrated if they work, but they remain relatively better integrated if their mothers work and they do not. It seems that the symptomatology of sons who are returned to their families of orientation increases with the amount of time that they have to spend with their parents. There are findings which would indicate that wives are not very healthy for husbands either. One might wonder why there is such a marked difference reported between two familially-neutral settings, the hostel and the boarding house. There is a clue

in the author's description of the poverty stricken surroundings of the hostel. Despite my insistence that isolation is bad, and I have certainly emphasized this normative approach, it has been demonstrated in the Midtown (29) study that certain wealthy isolates are as healthy as the remainder of the top third of the economic group. To replace one normative idea with another (if one has to be isolated): it helps to be comfortably off financially. Both Carstairs' and Hare's work could be interpreted as supporting this idea.

SECTION VI

THE EXTENDED FAMILY

The effect of having an extended versus a nuclear family could be explored in relationship to any of the family types. I am, however, using it only to describe the case where the index person has been separated from his own family of procreation and enters another family of procreation, usually that of one of his children. The typical case of this process in our society concerns the older person. His own children are grown up and have left home. Then his spouse dies. At this point it seems typical for him to live alone for a period of time but in the end it is not unusual for him to take up residence with the family of procreation of one of his adult children.

The great contrast between this situation and that in which an adult child remains in the parental home lies in the different power positions in the two cases. When the aging adult joins his child's family, the child is the chief breadwinner or, if a woman, has the main socio-emotional task while the parent has to play a secondary role. This situation is dramatically different from what it was formerly. As before, the greatest conflict may be expected between father and son, when both are working, and the next greatest between mother and son. Daughters, with their greater role flexibility, may be better able to withstand the difficulties of this situation. This may be why, both normatively and actually, it is considered best for

parents to live with their female children if they cannot live alone.

Gruenberg (22) has pointed out that among elderly people the rate of hospitalization for mental illnesses of the senium was greatest in areas with a high percentage of the population living alone, even though, as the author points out, whether or not the elderly psychotic actually lives alone is still in question. Hare does not find this relationship between housing and hospitalization with diseases of the senium in Bristol, and believes a possible reason for the difference is the social legislation which provides so much assistance to the elderly in the British welfare state.

However, since Hare's study compares those living with their families with those not living with their families, his study is not strictly comparable to Gruenberg's. And neither study, because of the nature of the data, permits one adequately to examine the concept of isolation. Bellin and Hardt (6) in a study of symptomatology of mental illness in an elderly population found, however, that there were no differences in the amount of illness found among a group who were living with their spouses and those who had been widowed. Again for the widowed we lack information on their actual living status. As I suggested when I discussed schizophrenia, there is a need for a crucial study in this area focused on the interrelationship of the variables of hospitalization, amount of illness, family state, isolation, and economic condition, so that we can begin to understand the interpenetration of these variables.

THE FAMILY UNIT

Several writers now support the view that it is impossible to consider any one person in isolation from his interrelated family network. This concept underlies Ackerman's (1) emphasis on "family diagnosis." Jules Henry has, from the viewpoint of the social scientist, demonstrated that the reactions of one member of the family can be understood only when viewed as the result of the effects of all the operant familial relations. As the num-

ber of persons in the family increases these relationships multiply very rapidly. Spiegel, who advocates a transactional approach, not only takes account of the number of relationships, but also shifts his focus of observation back and forth between family relationships, cultural values, and psychodynamics. This approach is so complex that he is often forced to use illustration instead of analysis. Bowen and Bateson seem to have decided (while they admit the importance of the family as a whole) that it is most important to focus on the parent-child triads. They believe this is the focus of most of the pathological interaction in the family.

I have by no means exhausted the subject of the family and mental illness here. I have not considered, for example, the family's reaction to the presence of defective children, and the psychiatric treatment of families or parts of families is beyond my scope. The research into the impact of mental illness upon the family is so well summarized by Clausen and Yarrow (11) that I will not resummarize it here. Mention should also be made of the careful study of Downes and Simon (14) who studied the characteristics of families of psychoneurotic patients. The striking finding of this study is the high secondary rates of psychoses and mental deficiency and even of chronic physical illness. There is a need for further work stemming from this excellent study. Some other aspects of the subject can be found in the chapter, "The Family and the Psychiatric Patient" by Spiegel and Bell in the recently published American Handbook OF PSYCHIATRY. Their formulations and their extensive bibliography should be as useful to others as they have been to us.

SUMMARY

It is clear that organized study of the area of the family and mental illness is in a state of chaos. I have attempted to categorize studies and to suggest ways in which the more important researches are related to one another. This process has forced attention to areas where there are logical research needs and suggested ways in which these projects might be formulated.

REFERENCES

- 1. Ackerman, N. W.; Behrens, M. L.: Study of Family Diagnosis. American Journal of Orthopsychiatry, January, 1956, 26: 66-78.
- 2. Adler, L. M.: The Relationship of Marital Status to Incidence of, and Recovery from, Mental Illness. Social Forces, December, 1953, 32: 185-194.
- 3. Ainsworth, M. D.; Bowlby, J.: Research Strategy in the Study of Mother-Child Separation. [Paris] Centre International de l'Enfance, *Courier*, March, 1954, 4: 105-131.
- 4. Barnes, H. E.; Ruedi, O.: THE AMERICAN WAY OF LIFE, AN INTRODUCTION TO THE STUDY OF CONTEMPORARY SOCIETY. New York, Prentice-Hall, 1950, 931 pp.
- 5. Bateson, G. et al.: Toward a Theory of Schizophrenia. Behavioral Science, October, 1956, 1: 251-264.
- 6. Bellin, S. S.; Hardt, R. M.: Marital Status and Mental Disorders Among the Aged. American Sociological Review, April, 1958, 23: 155-162.
- 7. Bender, L.; Grugett, A. E., Jr.: Study of Certain Epidemiological Factors in Group of Children With Childhood Schizophrenia. American Journal of Orthopsychiatry, January, 1956, 26: 131-145.
- 8. Bowen, M.: Family Relationships in Schizophrenia. Chapter 7 in Schizophrenia—An Integrated Approach. (A. Auerback, Ed.), New York, Ronald Press, 1959. 224 pp.
- 9. Bowlby, J.: MATERNAL CARE AND MENTAL HEALTH. Monograph Series No. 2. Geneva, World Health Organization, 1952. 194 pp.
- 10. Brown, G. W.: Experiences of Discharged Chronic Schizophrenic Patients in Various Types of Living Group. The Milbank Memorial Fund *Quarterly*, April, 1959, 37: 105-131.
- 11. Clausen, J. A.; Yarrow, M. R. (Eds.); The Impact of Mental Illness on the Family. The Journal of Social Issues, 1955, 11, No. 4 (whole issue).
- 12. Davis, J. A.; Freeman, H. E.; Simmons, O. G.: Rehospitalization and Performance Level Among Former Mental Patients. *Social Problems*, July, 1957, 5: 37-44.
- 13. Davis, K.: Final Note on a Case of Extreme Isolation. The American Journal of Sociology, March, 1947, 52: 432-437.
- 14. Downes, J.; Simon, K.: Characteristics of Psychoneurotic Patients and Their Families as Revealed in General Morbidity Study. The Milbank Memorial Fund Quarterly, January, 1954, 32: 42-64.
- 15. Erikson, E. H.: CHILDHOOD AND SOCIETY. New York, W. W. Norton, 1950. 397 pp.
- 16. Faris, R. E. L.; Dunham, H. W.: MENTAL DISORDERS IN URBAN AREAS: AN ECOLOGICAL STUDY OF SCHIZOPHRENIA AND OTHER PSYCHOSES. Chicago, University of Chicago Press, 1939. 270 pp.
- 17. Federn, P.: Ego Psychology and the Psychoses. (E. Weiss, Ed.), New York, Basic Books, 1952. 375 pp.
- 18. Freeman, H. E.; Simmons, O. G.: Mental Patients in the Community: Family Settings and Performance Levels. *American Sociological Review*, April, 1958, 23: 147-154.

- 19. Freeman, H. E.; Simmons, O. G.: The Social Integration of Former Mental Patients. The International Journal of Social Psychiatry, Spring, 1959, 4: 264-271.
- 20. Gerard, D. L.; Houston, L. G.: Family Setting and Social Ecology of Schizophrenia. Psychiatric Quarterly, January, 1953, 72: 90-101.
- 21. Gerard, D. L.; Siegel, J.: Family Background of Schizophrenia. Psychiatric Quarterly, January, 1950, 24: 47-73.
- 22. Gruenberg, E. M.: Community Conditions and Psychoses of the Elderly. The American Journal of Psychiatry, June, 1953, 110: 888-896.
- 23. Hardt, R. H.: The Ecological Distribution of Patients Admitted to Mental Hospitals from an Urban Area. The Psychiatric Quarterly, January, 1959, 33: 126-144.
- 24. Hare, E. H.: Mental Illness and Social Conditions in Bristol. Journal of Mental Science, April, 1956, 102: 349-357.
- 25. Hare, E. H.: Family Setting and the Urban Distribution of Schizophrenia. *Journal of Mental Science*, October, 1956, 102: 753-760.
- 26. Henry, J.: Family Structure and Transmission of Neurotic Behavior. American Journal of Orthopsychiatry, October, 1951, 21: 800-818.
- 27. Kohn, M. L.; Clausen, J. A.: Social Isolation and Schizophrenia. American Sociological Review, June, 1955, 20: 265-273.
- 28. Kohn, M. L.; Clausen, J. A.: Parental Authority Behavior and Schizophrenia. American Journal of Orthopsychiatry, April, 1956, 26: 297-313.
 - 29. Langner, T.: Address to the Eastern Sociological Society, 1952.
- 30. Lansing, J. B.; Kish, L.: Family Life Cycle as an Independent Variable. American Sociological Review, October, 1957, 22: 512-519.
- 31. Lidz, T.: Schizophrenia and the Family. Psychiatry. Journal for the Study of Interpersonal Processes, February, 1958, 21: 21-27. (A complete list of Lidz's papers will be found in Wynne, et al., reference 55.)
- 32. Lidz, T.: et al.: The Intrafamilial Environment of the Schizophrenic Patient. I. The Father. Psychiatry, November, 1957, 20: 329-342.
- 33. Malzberg, B.: Is Birth Order Related to Incidence of Mental Disease? American Journal of Physical Anthropology, July-September, 1938, 24: 91-104.
- 34. Malzberg, B.: Social and Biological Aspects of Mental Disease. Utica, New York, State Hospitals Press, 1940. 360 pp.
- 35. Mead, G. H.: MIND, SELF AND SOCIETY FROM THE STANDPOINT OF A SOCIAL BEHAVIORIST. (C. W. Morris, Ed.) Chicago, The University of Chicago Press, 1934. 400 pp.
- 36. Michael, C. M.; Morris, D. P.; Soroker, E.: Follow-up Studies of Shy Withdrawn Children II: Relative Incidence of Schizophrenia. *American Journal of Ortho-psychiatry*, April, 1957, 27: 331-337.

5

á

- 37. Naegele, K. D. L.: Mothers: A Study of Middle Class Child Rearing Practices. (In preparation)
- 38. Orlansky, H.: Infant Care and Personality. *Psychological Bulletin*, January, 1949, 46: 1-48.
- 39. Parsons, T.; Bales R. F.: Family Socialization and Interaction Process. Glencoe, Illinois, Free Press, 1955. 422 pp.

- 40. Piaget, J.: The Language and Thought of the Child. New York, Harcourt Brace, 1926. 246 pp.
- 41. Roberts, B. H.; Myers, J. K.: Family and Class Dynamics in Mental Illness. New York, John Wiley, 1959. 295 pp.
- 42. Sewell, W. H.: Infant Training and the Personality of the Child. The American Journal of Sociology, September, 1952, 58: 150-159.
- 43. Spiegel, J. P.: New Perspectives in the Study of the Family. Marriage and Family Living, February, 1954, 16: 4-12.
- 44. Spiegel, J. P.: The Resolution of Role Conflict Within the Family. Psychiatry, February, 1957, 20: 1-16.
- 45. Spiegel, J. P.; Bell, N. W.: The Family of the Psychiatric Patient. Chapter 5 in American Handbook of Psychiatry, Vol. 1. (S. Arieti, Ed.) New York, Basic Books, 1959. 999 pp.
- 46. Spiro, M. E.: Is the Family Universal? American Anthropologist, October, 1954, 56: 839-846.
- 47. Spitz, R. A.: Hospitalism. An inquiry into the Genesis of Psychiatric Conditions in Early Childhood. The Psychoanalytic Study of the Child, 1945, 1: 53-74.
- 48. Spitz, R. A.; Wolf, K. M.: Anaclitic Depression. An Inquiry into the Genesis of Psychiatric Conditions in Early Childhood. *The Psychoanalytic Study of the Child*, 1946, 2: 313-342.
- 49. Stevenson, I.: Is the Human Personality More Plastic in Infancy and Childhood? The American Journal of Psychiatry, August, 1957, 114: 152-161.
- 50. Sullivan, H. S.: The Interpersonal Theory of Psychiatry. (H. S. Perry; M. L. Gawel, Eds.) New York, W. W. Norton, 1953, 393 pp.
- 51. Thorne, F. C.: Epidemiological Studies of Chronic Frustration-Hostility-Aggression States. *The American Journal of Psychiatry*, February, 1957, 113: 717-721.
- 52. Thurston, J. R.; Mussen, P. H.: Infant Feeding Gratification and Adult Personality. *Journal of Personality*, September, 1950-June, 1951, 19: 449-458.
- 53. Wahl, C. W.: Some Antecedent Factors in Family Histories of 568 Male Schizophrenics of United States Navy. *The American Journal of Psychiatry*, September, 1956, 113: 201-210.
- 54. Waller, W.: The Family: a dynamic interpretation. (Revised by R. Hill, Ed.) New York, Dryden Press, 1951. 637 pp.
- 55. Wynne, L. C., et al: Pseudo-Mutuality in The Family Relations of Schizophrenics. Psychiatry. Journal for the Study of Interpersonal Processes, May 1958, 21: 205-220.

Discussion

DR. JOHN H. CUMMING: I would like to add a brief explanatory note on the "incompleteness" which is in the title. This incompleteness was quite deliberate. I didn't try to make a comprehensive coverage of the literature, first, because I was aiming at trying to

Discussion 213

develop some sort of a conceptual scheme. A few studies which I thought were important I took to see how they fitted into the scheme and what additional ideas this process might generate.

The second point in the incompleteness is that the literature on the family would, I think, drown one if one tried to follow it through all the places where it could be found: in psychiatry, in the social sciences, in eugenics literature, in the literature on problems such as divorce, and in much educational literature. It is found in all those areas.

The final bit of incompleteness, and one that I hope we will get back to in this conference, is looking at the other side of the picture, which Dr. Densen brought up this morning.

While I have tried to introduce a systematic way of looking at the family, I think we still need to have a systematic way of looking at some of the diseases that we are trying to relate to the family, and Dr. Densen's comments on the reliability of diagnoses and such matters I think should come up for discussion.

I asked Dr. Carstairs, in our early correspondence, if he would enrich this with some of the British literature, and I think he is going to do so.

DR. MORRIS CARSTAIRS: I think we are all grateful to Dr. Cumming for having produced this chart and compass to guide us through the extremely widespread territory he has been assigned to cover in the literature.

I am sure we share with him a sense of inability to encompass all the different studies which have a bearing on the family, particularly since there is such a wide range of methods of approach and also of scientific quality.

I would like to recall the structural principles introduced near the beginning of his paper in order to place some additional studies in the chart that he has drawn up.

ŀ

First of all, he lists different ways of looking at the family. There is the family of orientation into which one is born; then this idea of family limbo, when one leaves the parental family and hasn't set up a family of one's own; there is a group of studies concerned with the family of procreation; and finally, he draws our attention to the second limbo that can intervene when one's procreative life is over, when one is entering the later stages of one's career.

In his text he also reminds us that this isn't the sum of ways of looking at the family. There is also the family considered as the extended network of kinship. This has often been neglected in studies of our society, although it is a matter of great interest to anthropologists, and we are indebted to such people as Michael Young for reminding us that the extended family is by no means vestigial in contemporary urban communities. It still has quite a lively function, as Michael Young has demonstrated in Bethnal Green in the East End of London (24).

Young has recently informed me that while he was in California, early in 1959, he carried out a pilot study among middle class, fairly well-off households in Palo Alto. He found to his great surprise that contact with the older generation was still very much alive there, occurring with a regularity and frequency which was very far from what he had been led to expect.

Michael Young's collaborators have shown in subsequent studies that the extended family still has a significant function in times of crisis such as bereavement (15) and in old age (22). The latter study documented in detail the observation made in an earlier post-war survey: "Comparatively few old people live a life of complete isolation, the great majority living in contact with their children so that they have to be considered as part of a family unit rather than as separate individuals." (18)

These studies have obvious affinities with those of Gruenberg on the psychoses of the elderly in Syracuse, New York (11).

Dr. Cumming has also reminded us of Parson's functional analysis of what goes on in family life: the essential process of socialization of the younger members, and the secondary process of stabilization and control. Here I confess to some perplexity about the difference between these stages, since "stabilization and control" seems simply a continuation of the socialization process. Perhaps if I go back to read Parsons in extenso, I will understand better the contrast he introduces there.

Dr. Cumming finally indicated the major antitheses in roles within the family members—the contrasts in power roles between parents and children, the predominantly instrumental roles of the males, and the socio-emotional roles of the female members.

At this point I was reminded of the more elaborate breakdown of family in its process of development used by Dr. Lilli Stein (19)

Discussion 215

in a survey in the suburbs of Edinburgh. She found it rewarding to look at families with no children, families with pre-school children, families with children going to school, families with young unmarried adults, and (as occurred frequently in the post-war situation) families with younger members who are married but living with the parent household. This type of breakdown was found important in a tuberculosis study and would be, perhaps, no less important in a study of mental disorder.

One incidental by-product of Dr. Stein's survey was the discovery that in this suburb of Edinburgh, where we tended to think that divorce and separation were relatively infrequent, families with school children had an over-all rate of 16 per cent broken homes. This is the base line against which we have got to measure the significance of broken homes in any future clinically-oriented studies in similar communities.

On page 197 of his paper, Dr. Cumming mentions in passing that he wishes there were better definitions of terms employed for studies of emotional deprivation and separation in the family.

In fact, Bowlby has filled that gap. With Mary Ainsworth, he published a monograph in which they discuss with great clarity the necessity of distinguishing between physical separation and various forms of emotional deprivation where no physical separation from the parents had taken place (1).

It was after writing this essay on methodology that Bowlby carried out his careful study of children in a tuberculosis hospital (4) at the end of which he very candidly admitted that the outcome had not been as he predicted—an admission which did more to inspire confidence in the soundness of his observations than the rather sweeping claims which preceded (and, regrettably, followed) this publication.

Dr. Cumming invited me, in discussing his paper, to draw attention to some recent family studies in Britain. Accordingly, I have reviewed a number of such studies and tried to place them in the context of his charts. This was not always easy.

The first thing I found was that it wasn't particularly rewarding to use a separate column for socialization and another for stabilization because I failed to see the conceptual contrast between the two processes. My next difficulty lay in separating studies of functional process in the family from studies exclusively concerned with struc-

ture of the family. In fact, I found that both elements were present in many of the studies I was concerned with.

For example, Bowlby, as one knows, is continuing studies of deprivation in the family setting. His earliest studies were concerned with fracture; that is, with a physical situation in which one parent—the mother—was removed from the family situation or the child was removed from the mother. His more recent studies have been concerned more with anlyses of emotional deprivation in the family scene, whether physical separation has occurred or not.

In contrast, Dr. James Douglas (who is carrying forward a cohort study of a sample of all children born in England, Wales and Scotland in one week of March, 1946) is of necessity concerned with structural aspects because his population is dispersed throughout the country and his type of information is largely documentary (supplemented at intervals by interview data).

Nevertheless he has been able to throw some interesting light on this question of separation. It is he who informed us that when a child is separated from its mother yet remains home in familiar surroundings the observations do not indicate any distress in the child; whereas if the child was removed from its mother and also taken away from home at the same time, it showed nightmares and other signs of emotional disturbance for quite a long period after that event (8).

A valuable contribution to this field of inquiry was Dr. Hilda Lewis' dispassionate assessment of the outcome, two years after passing through an experimental treatment center, of 240 children whose family life had become severely disrupted (14). This monograph differed from some other studies of childhood deprivation in the sobriety of its findings, and in drawing attention to the fact (as Skeels, and Hewitt and Jenkins have done in the U.S.A.) that certain types of parental incompetence have predictable ill-effects on their children.

Several surveys have been made of the conspicuously inefficient or "problem" families and of the condition of children who have grown up in such a disorganized environment. The findings of five extensive (as contrasted with intensive) studies of this kind have been published by the Eugenics Society, in a small book which contains a useful bibliography and a discussion of the methods used in this type of research (2). In a subsequent paper (3) the same author ana-

Discussion 217

lyzed the frequency of disruption of marriage in the histories of patients suffering from various psychiatric illnesses and put forward a proposal for preventive action to minimize the consequences of this family breakdown.

The interaction of parents and children was the principal theme of a study by Miss E. M. Goldberg (9) which sought clues to the etiology of duodenal ulcer by contrasting the family background and childhood experiences of 32 young male patients and 32 controls. As so often in this type of inquiry, the findings were not sufficiently clear-cut to convince a skeptical reader of the ultimate importance of the types of faulty relationship which were inculpated. This can be ascribed to the author's honesty in making no concealment of the great complexity of the interactions observed.

A similar criticism can be advanced of the monograph by Elizabeth Bott which had the merit of trying to advance theoretical concepts which would permit a more sophisticated analysis of roles within contemporary middle class urban families. The attempt was a courageous one but, as a fellow sociologist pointed out in a review of this work (23), certain of her key concepts—such as the contrast between "loose" and "close knit" social networks—were insufficiently supported by data of observation.

A part of Miss Goldberg's more recent work has something in common with the studies of Lidz, Bateson, Bowen and Wynne, who are searching for etiological factors in psychogenesis of schizophrenia. However, it is only part of her work because being in Dr. Morris' unit she is obliged to temper her purely functional interest with statistical and structural inquiries. In this area, she has been collaborating with Dr. Stuart Morrison in his studies of the families of young male schizophrenics.

Morrison's work is cited by Dr. Dunham as a contribution to the debate about social drift in the life history of schizophrenics. Morrison showed that though young schizophrenics accumulate in the lowest occupation classes, their fathers a generation before were found to be evenly distributed, in terms of occupation, throughout the population of England of a generation before (16).

Miss Goldberg is following this up by studying two series of 100 consecutive young male schizophrenics, first-admissions to two large hospitals near London. She has allowed me to see a preliminary report which confirms Stuart Morrison's finding and also gives more

information about what has been going on in the schizophrenic patient's life experience. She indicates that although the patients, as a whole, were quite good at school (they were actually better than a control population in their school experience) thereafter they were non-starters in occupational terms. They never got beyond the two bottom grades in the occupational ladder.

Dr. E. H. Hare's work is referred to in two of the papers before us today. He is also interested in the life history of the male schizophrenic, and he has committed himself to the opinion that the accumulation of young male schizophrenics in the socially disorganized parts of cities is frequently a consequence of the development of the illness in their own life histories (12).

Dr. Jack Tizard and Miss Jacqueline Grad have also been interested in the family of orientation; in this case, of imbecile and idiot children living in Greater London (10). They have been concerned with the child but more especially with the family. They set out to determine the consequences both to the child and to the family if this severely handicapped child were, or were not, admitted to an institution.

Going on to the next phase of family development—"Limbo 1"—I can cite three people interested in juvenile deliquency. My justification for putting them there is that they study young people who have escaped from family control either while attending school or as members of adolescent gangs. These workers show a graduation of research interest from analysis of personal interaction—which is Dr. Peter Scott's first concern—to Dr. T. C. N. Gibbens—who combines biological, clinical and statistical approaches—through to Dr. Leslie Wilkins, whose studies have been documentary and statistical.

Dr. Mervyn Susser and Dr. Zena Stein, working in the Manchester University Department of Social Medicine, have made a study of the experiences in young adult life of boys and girls who went to schools for the mentally handicapped: young mental defectives of the higher degree.

At this stage, I should like to draw attention to the study by Professor Stengel and Miss Cook (20) on attempted suicides. One is in a quandary where to place a study like this because some of the subjects came from families of orientation and some from families of procreation. I put it here simply because they are, on the whole,

Discussion 219

a younger age group than those that were studied by Sainsbury (17) in his monograph on suicide in London.

Sainsbury is also impossible to place accurately in any one of these pigeonholes. If I associate his study with the second type of familial limbo—that which supervenes after the family of procreation has dispersed—it is because a large proportion of his cases belonged to this older age group, and suffered from its characteristic disadvantages. An important finding of this study was to point to the correlation between residence in a single room in households broken up into small subdivisions and high rate of suicide in different boroughs of London.

An instance of research centered on the family of procreation, is found in the work of Mrs. Margaret Brandon (5). She studied mental defectives, who, after having been "ascertained" (by the Mental Health Officer of the Local Authority) or treated in institutions, had subsequently married. She was concerned to see to what extent their marriages had either succeeded or become casualities and also what the consequences were for their offspring.

Miss Enid Mills, whose study can also be listed under the rubric of the family of procreation because most of her subjects are in this category, is engaged in studying admissions to mental hospitals from Bethnal Green. An associate of Dr. Michael Young, she has been able to compare the families from which a patient was admitted to a mental hospital with the families of Bethnal Green, as a whole, on which Young's group has such excellent data.

She is comparing them in respect to structural characteristics and also behavioral characteristics, using the same demographic and behavioral observations as in the earlier study, e.g. their measures of types of interaction, such as the frequency of visits and the frequency of asking for help between different categories of kin in the families in this area.

Two of Miss Mills' preliminary observations perhaps are worth bringing to attention. First, she notes that Bethnal Green has a very stable, old-standing, East End population with one of the lowest percentages of immigrants of any part of London, and yet in her counts of the area's mental hospital population, there is a disproportionately high proportion of immigrants. Miss Mills finds in Bethnal Green that people tend to minimize the recognition of mental disorder and then suddenly go overboard and label it as

something very severe and probably irremediable. She points out that residents are slower to identify insanity or gross mental disorder in the members of families which are well known and which have high standing in the community. This perhaps contributes to the disproportionate number of immigrants among her patient population.

In our own Social Psychiatry Research Unit¹ we have been concerned, Mr. Brown, Miss Topping and myself, with a follow-up of chronic psychotic patients who leave the mental hospital and return to the community. This too can be considered in relation to the family of procreation because one of the most striking findings in our study was the contrast in outcome of schizophrenic and other types of patients, notably manic-depressive patients, in respect to the household to which they returned (6).

We found that the schizophrenics fared worst in the marital household, nearly as badly in the family of orientation (their parents' households) and very much better with distant relatives or with strangers. The opposite was the case for the affective psychotics, who fared best with their wives and worst with distant relatives and strangers.

Finally, I might refer to one or two studies concerning the later stages of life, such as that of Dr. Kenneth Rawnsley in South Wales. He is engaged in the measurement of attitudes towards chronic mental illness in the population of South Wales, and his first interviews have been with the kinsfolk of patients who have been separated from their families by long periods of hospitalization. The separation was so complete in some cases that his interview served to remind his informant that the forgotten patient was still alive.

Professor Sir Aubrey Lewis was responsible for a wartime study of social factors related to the admission of the elderly patients to mental hospitals (13). This was a modest inquiry but it indicated very clearly the need for more systematic research into those cases in which the disappearance of former family support had contributed to the elderly patients' being admitted to hospital.

In this brief conspectus of recent British studies of the family it may be observed that there is a bias towards empiricism and a relative paucity of theoretical formulations. This can, perhaps, be attributed to the influence of major trends in social policy which

¹ Social Psychiatry Research Unit, [British] Medical Research Council.

13

Œ.

li.

ă:

ia;

N.

چ

T:

e:

7

ř.

led during and immediately after the second World War to the establishment of the welfare state. F. A. E. Crew has commented (7) with characteristic pungency on the consequences for family life of these events: "Changes in the social and political structure of society have tended to take the power out of the hands of parents and place it in those of the head of state. . . Whether or not the replacement of parents by bureaucrats is a good thing must be determined by reference to the quality of the care given to the young by the two parties."

Simultaneously with the growth of public responsibility for deprived and handicapped members of the community there has been a critical reappraisal of public institutions. As Titmuss has pointed out (21), post-war Royal Commissions have condemned, in turn, large institutions for orphans, for paupers, for the infirm and elderly, and for mental patients: the emphasis has shifted to the home and the family. In psychiatry, particularly, "community care" is now the predominant theme. The passing of the Mental Health Act, 1959, with its liberal provisions for informal treatment of the mentally ill has only accelerated the demand for further studies of the circumstances and the interactions in families which contain a psychiatrically disabled member.

REFERENCES

- 1. Ainsworth, M. D.; Bowlby, J.: Research Strategy in the Study of Mother-child Separation. [Paris] Centre International de l'Enfance, Courier, March, 1954, 4: 105-131.
- 2. Blacker, C. P., (Ed.): Problem Families. London, Eugenics Society, 1952. 123 pp.
- 3. Blacker, C. P.: Disruption of Marriage. Some Possibilities of Prevention. Lancet, March 15, 1958, 1: 578-581.
- 4. Bowlby, J., et al.: Effects of Mother-child Separation: Follow-up Study. British Journal of Medical Psychology, 1956, 29: 211-247.
- 5. Brandon, M. W.: The Intellectual and Social Status of Children of Mental Defectives. Journal of Mental Science, October, 1957, 103: 710-734.
- 6. Brown, G. W.; Carstairs, G. M.; Topping, G.: Post-Hospital Adjustment of Chronic Mental Patients. *Lancet*, September 27, 1958, 2: 685-689.
- 7. Crew, F. A. E.: Measurements of the Public Health. Edinburgh, Oliver and Boyd, 1948. 243 pp.
- 8. Douglas, J. W. B.; Blomfield, J. M.: CHILDREN UNDER FIVE. London, Allen and Unwin, 1958. 177 pp.

- 9. Goldberg, E. M.: Clinical Studies in Marriage and the Family: A Symposium on Methods. III. Experience with families of young men with duodenal ulcer and 'normal" control families. Some problems of approach and method. *British Journal of Medical Psychology*, 1953, 26: 204-214.
- 10. Grad, J.; Tizard, J.: The Mentally Handicapped and Their Families. Maudsley Monographs. (In press.)
- 11. Gruenberg, E. M.: Community Conditions and Psychoses of the Elderly. The American Journal of Psychiatry, June, 1953, 110: 888-896.
- 12. Hare, E. H.: Mental Illness and Social Conditions in Bristol. Journal of Mental Science, April, 1956, 102: 349-357.
- 13. Lewis, A. J.; Goldschmidt, H.: Social Causes of Admissions to a Mental Hospital for the Aged. American Sociological Review, July-October, 1943, 35: 86-98.
- 14. Lewis, H.: Deprived Children. London, Oxford University Press, 1954. 163 pp.
- 15. Marris, P.: Widows and Their Families. London, Routledge and Kegan Paul, 1958. 172 pp.
- 16. Morrison, S. L.: Principles and Methods of Epidemiological Research and Their Application to Psychiatric Illness. *The Journal of Mental Science*, October, 1959, 105: 999-1011.
- 17. Sainsbury, P.: Suicide in London. Maudsley Monographs No. 1. London, Chapman and Hall, 1955. 116 pp.
- 18. Sheldon, J. H.: The Social Medicine of Old Age: report of an inquiry in wolverhampton. New York and London, Oxford University Press, 1948. 239 pp.
- 19. Stein, L.; Sklaroff, S. A.: Stages of Family Growth. Paper read at the Royal Statistical Society, London, March, 1957. (Unpublished.)
- 20. Stengel, E.; Cook, N.: Attempted Suicide: its social significance and effects. Maudsley Monographs No. 4. London, Chapman and Hall, 1958.
- 21. Titmuss, R. M.: Community Care as a Challenge. The [London] Times, May 12, 1959, 11: 6-7.
- 22. Townsend, P.: The Family Life of Old People: An inquiry in east london. Institute of Community Studies, Report No. 2. London, Routledge and Kegan Paul, 1957. 284 pp.
- 23. Townsend, P.: Sociology and the Relationship Between Man and Wife. Case Conference, April, 1958, 4: 293-298.
- 24. Young, M.; Willmott, P.: Family and Kinship in East London. Glencoe, Illinois, Free Press, 1957. 232 pp.

SUMMARY OF DISCUSSION

1. What was implied by the idea that a family may keep its members unduly long? Dr. Cumming suggested in his paper: "... the family must remain a sub-system of the total society.

Discussion 223

If it takes on too many of the aspects of a self-contained system, it tends to retain its members unduly long and to prepare them inadequately for membership in alternative groups."

17. 12. 12

l ige

φĒ

1 : L

P.

io.

n. E

. 1

:2

e.

JE.

12

In more general form, the question concerned the length of retention and its relation to personal and social disorder. When applying the question to the present day family in a Western urban setting, many observers stated that trouble often stemmed from too short a retention in the family—quite the opposite of "unduly long" proposed by Dr. Cumming. Sociologists like Burgess and Zimmerman at Harvard believe that the family has developed into such a specialized social sub-system, with so great a loss of former functions, that it no longer prepares the child adequately for leaving the family of orientation and living outside it as an adult. This factor is seen as contributing to an increase in some kinds of mental illness, especially neuroses and stress disorders.

To be sure, the entire question is relative to the setting in which the family is found. Each culture provides its own concept of what a family is and does, and it provides role expectations for the various members, both inside and outside the family. In Chinese and Indian cultures with an extended family system, many functions remain within the household which govern economic and religious aspects. For such cultures the same issue (incompatibility between the individual's socialization within the family and the social demands imposed upon him outside the family) does not occur.

In the United States today, recent data from the Census Bureau show that the individual spends far less time in the family of orientation than ever before. Concurrently indices of personal and social disorganization, such as rates of delinquency and divorce, are recording increases. It seemed most plausible to infer that these two sets of facts are related: that offspring leave the family of orientation not yet completely socialized and are passed on to other groups ill-equipped to continue the process, thus placing the individual in stressful situations and the likehood of consequent disorganization.

Hypothetically, either too long or too brief a period of retention in the family might produce undesirable effects. It would be a matter of empirical study to learn which situation was true of any particular setting and how much of a problem it created. Operationally what is needed is to establish various indices of disorder and to relate these to length of retention, graduated into time intervals.

This information should prove very enlightening, although it can not of itself settle the problem of conceptualizing what is going on. The concept of "unduly long" implies that there is some standard by which duration can be judged. However, if the standard is defined in terms of social expectations, then there exists the danger of circular reasoning.

- 2. The last point suggested a similar caution—that of confounding cause with effect. As an example, one of the most widely quoted studies of maternal deprivation was by Goldfarb. Close inspection of his data reveals that at least two of the 15 cases which remained in the institution were grossly defective. Analytically, two cases are sufficient to produce statistically significant differences between the experimental and control groups. It seems most probable that the supposed effects (maternal deprivation through institutionalization) were actually causes in several cases; that some of the children were kept in the institution because they were either defective or damaged.
- Dr. Pasamanick pointed out that the data he and his associates gathered prospectively could have led to similar confusing inferences had the same children been studied retrospectively. Among brain-damaged infants the amount of brain injury has a significant direct relationship both to the amount of tension in the mother as well as to the amount of hospitalization of the child. Thus, had they studied these cases retrospectively, they would have found that behavioral difficulties were directly related to time spent in the hospital. From which they might have inferred that maternal deprivation was the cause of the difficulties.
- 3. Other discussion pointed out that sample size was quite small in the great majority of studies on the family. This raised questions as to the validity and statistical significance of their findings. However, it is possible to take a broader approach, in line with classic epidemiological methods, by working with a population rather than a small series of cases. In Singapore, Dr. Murphy was able to use such an approach, one which has to date been largely neglected in the United States. What is needed is to set forth clear-cut, recognizable characteristics by which families or households differ, such as whether or not they had pre-school children.
 - Dr. Kramer noted that he and his associates have tried to get

Discussion 225

mental hospitals to keep records that would yield family data comparable to the Census classifications, but with little success. Such data would be important both for studies of a retrospective and prospective nature, as well as for devising follow-up programs.

4. The treatment of families rather than the individual index case currently is an area of increasing interest. It was noted with disappointment that Dr. Cumming had not included it in his paper. It was suggested that attention to it has been long overdue because psychiatrists by concentrating on the one-to-one doctor-patient relationships have not adequately met patients' needs.

ď

(iii

12

M

ĸÞ

ĽĊ

30

r.

112

W.

عَنْهُ

5. To the Parsonian proposition that socialization and stabilization were two basic functions of the family, a third one was suggested by Dr. Murphy's work in Singapore. The concept conveyed by the term *sharing* referred to conjoint participation in decision-making and in performance of certain tasks within a family. It is Dr. Murphy's impression that sharing plays an important part in the prevention of certain types of mental breakdown in later life.

Dr. Cumming was queried on a number of specific points in his paper.

- 6. The widely used terms structure and function have been viewed rather differently by different writers. "Structure" can refer either to studies with a statistical approach and involving the use of questionnaires or to a way of abstracting phenomena. Dr. Cumming's paper seemed to intend only the latter usage.
- 7. Similarly, the usual meaning of the term extended family in anthropology is the web of interrelated households spanning several generations, ranging from the Navaho system to the "kissing cousins" of Virginia. Dr. Cumming's usage, it was noted, was more limited, referring only to the addition of another generation to the household.
- 8. Dr. Cumming, in comparing the child raised in an institution with the child raised in a family, had, apparently, backed away from the idea that the effect of the former leads to mental disorders. His suggestion that the two modes lead to two different kinds of people brought forth the query as to whether there was any evidence for his suggestion.
- 9. The characterization of male roles as instrumental and female roles as emotional, in the family, was not readily understood. For example, was it affectional rather than instrumental for a mother

to make beds, or to prepare food, or to go out and work, as many did?

10. Finally, Dr. Cumming was asked to enlarge upon his remark that "... organized study of the area of the family and mental illness is in a state of chaos." Was the situation due to something in the training of the people in the field? Might this be changing? What prospect was there of overcoming it?

DR. CUMMING: The words "unduly long" seem to have created some confusion. The discussion (Point No. 1) in pointing out that my presentation is culture-bound has, I think, helped me in explaining this term because the viewpoint is indeed culture-bound, and intentionally so. In our society it is generally agreed that once a male child reaches a certain age he should become self-supporting. Even if he is wealthy he is supposed to work if he wishes to avoid the epithet of "play boy." There is a value on work and on independence.

However, if we remember that there is a power differential between the generations of the nuclear family, and that the power of the father derives at least in part from his occupational role in the larger society, we can anticipate difficulties arising within families as the boy reaches the age when he is expected to work. If the boy does not work it is felt that he is not doing his part. Conversely, if he gets work and remains at home he has materially lessened the power gap between his father and himself and has created a situation of potential strife.

Thus a true dilemma can develop for the male child at a certain age. If the child remains at home after this dilemma develops, we would characterize this as being at home "unduly long."

We hope that in the near future we will be able to add data to speculation on this problem through a study in progress at our Unit.¹ This study will allow us to examine the length of time that people spend in their families of orientation and in the limbo state, and to relate this information to hospitalization for schizophrenia.

The thesis that there has been an increase in mental illness because the family has decreased in significance is an interesting one, but one about which the current evidence is ambiguous. It seems to me that we need a great deal more study of the way in which the func-

¹ Mental Health Research Unit, New York State Department of Mental Hygiene.

Discussion 227

رانا!

ج وا

11 2

IR C

.

Ì.

en.

nde me

ıt.

Ħ:

[] [

يبلع

ر. اولاً

17

ii i

1

zk

ı Œ

Œ.

此

tions which were formerly performed in the nuclear family are accomplished in modern society. Walter Miller (in a paper which I believe is yet unpublished) suggests convincingly that the street corner gang in lower-class neighborhoods has the function of socializing the male child into an adult male role, a function which might otherwise be lacking because these families often lack an adult male member. It is true that a high price is paid here for the performance of this function. We do, however, need to examine how well these various socializing functions are performed, both within the family and within substitute socializing institutions, and the price paid in each case. Only then can we estimate whether the older form or the newer one is more advantageous to our present social system.

Thus this thesis and mine are opposed. We shall have to await experimental evidence to decide which of the views is more accurate.

I would like to agree with, and emphasize the point concerning the need for what I have in another context called "markers" for the types of family interaction (Point No. 3). In England, Elizabeth Bott has characterized two polar types of family structure which have definite interaction styles. It is obvious that her typology does not apply to American families, but I am sure we could find different types of our own if we studied family structure closely enough. If we could locate structural markers, they would make epidemiological studies much more fruitful.

Now a word on Parsons' terms, the "instrumental" and the "socio-emotional" roles (Point No. 9). Two things should be kept in mind. First, these terms must always be thought of with reference to a given system. Secondly, since all roles have both elements in them we are always speaking of a relative predominance. The mother who takes a job outside the home is undoubtedly playing an instrumental role, but when both mother and father are at home with their children it is likely that her role will be much more socio-emotional than his will be.

I am glad that the discussion called attention (Point No. 7) to the fact that I have given the term "extended family" a very limited meaning in this paper. I have used it to mean the addition within the household of any family member other than two generational father-mother-child complex. This meaning is obviously too limited. While Parsons has postulated that the American family is by and large a nuclear family, studies such as those of Elaine Cumming and David Schneider have demonstrated that this is not really so. There seem to be interesting and important functions served in our society by the extended kinship group. Since these functions have been so little studied we cannot even speculate about their relationship to mental illness.