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SUMMARY

Networks were first used in British social anthropology in the 1950's. By the late 1960's there had been an enormous increase in interest in network analysis. During the 1970's the concept of network seems to have become an accepted part of anthropology's terminology and conceptual repertoire.

The thesis examines why networks should have become so prominent at these particular times. It is apparent that the problem of social change encourages the adoption of ego-oriented^{or} concepts including networks. An inability to cope with change is the major failing of the structuralist/functionalist paradigm in the eyes of many anthropologists and it is this which makes them look for new orientations.

In tracing the developments of the notion, it is essential to point to developments within anthropology as a whole, which are reflected in, or are reflections of wider changes in other academic disciplines and in western society. It seems that a new paradigm - in Thomas Kuhn's terms - has entered anthropology.

Network analysis has been used in conjunction with both the new and the old paradigm. Since network analysis is only a method, the theories with which it is linked are of enormous importance. Allied with aspects of the old paradigm the method becomes superficial and adds little to the understanding of the society described. When it

is linked with new anthropological approaches which stress a humanistic view of man, and the importance of meaning, it can provide a useful method of ordering data, and conceptualising society.

The thesis attempts to point to the ideas implied in various network studies to show how the method has been used productively in some cases and unproductively in different contexts. In this way it is possible to suggest how networks might contribute further to social anthropology.

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A number of people have helped me enormously in the writing of this thesis. Dr. Peter Fry encouraged me to write on this particular topic of network analysis. Mr. William Wilder made me question the precise role of network analysis within social anthropology, and also gave invaluable assistance in the correcting of the drafts.

Dr. Elizabeth Bott gave me an awareness of the wider applications of the concept, particularly in sociology. Lynn Oeser provided me with^a valuable opportunity to analyse networks empirically, as did the staff of the Irish sociolinguistic research project. Lynn also made me realise some of the problems of applying the method.

Professor Jeremy Boissevain sent me copies of articles from his forthcoming publications which have enabled me to consider important recent material which would otherwise have been inaccessible. He has also shown great interest in the progress of the thesis for which I am extremely grateful.

Finally my fellow students and colleagues have provided useful discussion and ideas, particularly Nick, Nomi and Sean.

Ultimately, of course, the opinions expressed and any errors are my own.

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I N T R O D U C T I O N

One of my major arguments in this thesis is that anthropologists should be more willing to appear in their own works. They should try to make their existential position and its attendant values available for scrutiny. I am aware that my attitudes towards network analysis have changed as I have worked on this thesis.

My experiences at University, and to an even greater extent whilst working on a research project in Ireland, altered my ideas about network analysis and anthropology. I can point to some of the ways in which this has happened and I feel it is worth trying to do so, although, inevitably, any such description is not complete.

I am not trying to apologise for the arguments which I set down in this thesis but merely to make the point that I am aware that they are a ^sresult of certain experiences and that, in time, and ⁱⁿthe light of different experiences, I may modify them.

I hope that the argument of the thesis will be clarified if I present a brief outline of the period I spent in working to produce it.

In 1969 when I registered at University College, London, I and my supervisor, Dr. Peter Fry, felt that the method had enormous potential and would probably provide a way of tackling anthropology's problems in coping with complex and urban societies. When Dr. Fry left, there was no-one who was particularly interested in the topic at University

College, so I left to return to Durham.

The most important thing I learnt at U.C.L., apart from a considerable broadening of my horizons^z, and understanding of the workings of academic life, was the importance of Thomas Kuhn's view of scientific revolutions. This I learnt in one of Mary Douglas's seminars. I also worked with Lynn Oeser on a project involving family networks. I was trying to help analyse information on networks collected in interviews which I did not conduct. I found the data very inadequate but blamed it on the interview schedule and the interviewers. Through Lynn I met Elizabeth Bott, ^{who} ~~she~~ was writing her "Reconsiderations" for the 2nd edition of "Family and Social Network". Lynn and I helped her to collect the studies that had been written since she had been concentrating on psycho-analysis.

In Durham I read all the network studies I could lay my hands on and continued to think that such a method - if formalised meaningfully - would provide a way for anthropology to advance. I still saw networks' potential as lying in the production of ~~really~~ clear, concisely defined concepts which would be applied in many sorts of research.

I found myself forced into the role of defender of networks (this had also happened at UCL). I had to find reasons to justify their existence and thereby that of my thesis. By the end of that year I had started to write and had also decided that network concepts

had been badly applied in many cases.

I then retired to Cornwall with all my books but well away from any other anthropologists. As I wrote I became increasingly disillusioned with the network methodology. I had felt all through my year at Durham that network's popularity implied some far bigger changes in social science and I was anxious to make explicit what I felt to be implied by the use of such a method. I also began to read more widely, particularly in sociology.

I wrote to Professor Boissevain asking him about his forthcoming books. He was extremely helpful and sent me copies of the papers. We corresponded on various topics such as the relevance of exchange theory and I found his interest of great value.

I was applying myself to writing when I heard I had a job on the Irish Sociolinguistic Research Project. This sounded ideal as I hoped to have the opportunity of carrying out field work - using network analysis - and so I took it. I had to leave for Ireland on a year's contract at a week's notice. So I abandoned my thesis and went to Dublin.

Once there the field work slowly receded over the next three to four months, and I suddenly realised that the job had changed in form entirely.

I had suggested that network analysis might be useful as a means of locating Irish speakers in Dublin within particular social environments and also to test hypotheses about how important Irish speaking

was - for instance, would it outweigh factors of class, age and so on?
 I had some reservations about using networks in a questionnaire context as I saw them as an integral of participant observation. However, I felt that I was being given an opportunity to try to produce a good network study. Working as part of a team meant that I expected to be told what variables we might consider as particularly relevant, and two of us attempted to elicit such variables from the project's director. The assumption seemed to be that network analysis was capable ~~of~~ ^{of} finding such variables in some mysterious, scientific way, and we were never told what we should be examining precisely. As a result our study was based on intuitive understanding of Irish speakers in Dublin - which was not particularly developed in my case (fortunately my colleague was Irish)

I and a sociologist wrote a questionnaire and administered ^{it} to 10 couples. It took us hours and we quickly realised that we were getting information in a particularly tedious way. However, our diagrams were greeted by the directors with great pleasure. They at least provided something concrete in ^{an} awkward situation - they could be computerised. Although I knew the information was, ~~infact~~, very unreliable, I felt I could not totally disown my own idea, and ~~by~~ this stage I also felt there was no point in trying any more to improve relationships on the project. There had been several meetings in which we had tried to say that networks were not able to provide a complete answer to a problem, and to ~~be used~~ ^{use them} effectively we had to know what theories were being advanced in the project. Frederick Barth on ethnicity was referred to, which I found encouraging, but there was no link between the high level theories and the haphazard collection of information by the research assistants.

At this stage I resigned and ^{resumed} ~~began to~~ work on my thesis. I found that I was particularly disillusioned with network studies which were formalised and quantified. I could see evidence of a new orientation emerging in social science which related to what was happening in other disciplines and in society itself. I could also see how I might use networks within this new schema.

I was given a third chance to apply networks - this time in a project on Irish migration in London. The project was to be run by a sociology professor who again seem^ed to feel that network analysis could be used to analyse data without any theoretical input. It became apparent that I would not be able to work on this project due to lack of time. However, before that, I had realised that my position was impossible. As a networkologist I was presumed to know how to cope with any problem and to be capable of producing relevant data in network form. I could not convince people that networks could only be used if there was a real theoretical basis which could produce concrete ideas to either be tested or presented in network terms. It seemed to me that the method was used to cover up a lack of such original ideas. It was seen as providing a sure and easy way of producing data. Unfortunately, some network analysts have implied that the concept is a panacea, and these people have come under particularly heavy attack in my theses. It was in this frame of mind that I wrote most of the thesis. The sterile discussions of terms I now find disheartening. I have therefore considered the relationships between social anthropology, network analysis and a new way of thought which I see pervading social science and society.

Since I wrote the thesis I have been enormously encouraged to read Liam Hudson's "Cult of the Fact", which agrees fundamentally with what I have argued. He has been able to discuss his ideas in terms of his own academic autobiography. Clearly, that is an inappropriate form for a thesis, but I feel it is necessary for me to explain how I arrived at my present position - which may well be extreme. The major influences have been my experiences in dealing with empirical data in the last year.

CHAPTER 1

1. THE NATURE OF ANTHROPOLOGY AND SCIENTIFIC PROGRESS

In order to clarify the way I have approached the topic of the relationship between network analysis and social anthropology, it is necessary for me to suggest how I conceptualize social anthropology (Network analysis will be discussed in more detail later). I see the aim of social anthropology as making different cultures accessible to one another by translating social action into terms meaningful to a member of another cultural group, usually that of the anthropologist. Clearly, this is an extremely complex translation since it involves cultural ideas of acceptable behaviour, classifications and so on which are, ultimately, unique not only to a culture but to a particular individual within that culture.

The novelist's task is also translation and he may attempt to cross temporal and cultural boundaries and to reach any reader.

"He [the novelist] is making an imitation, an imitation of the life of man on earth. He is making, it might be said, a working model of life as he sees and feels it, ..." (Walter Allen, The English Novel, 1954, p.14)

However, social anthropology has become increasingly specialised and has developed a sophisticated set of concepts and a language to describe them which is no longer readily understood by those outside the discipline.

"... all the time one has to try and develop analytical tools - concepts which have special names - that are specific to the profession, that represent one's attempts to try and escape from the culture of the society that one is looking at and to look at it as it were, from the outside." (J. Barnes, 1971)

The sacrifice of this wider audience has had to be made in order to penetrate more deeply into the situation being examined and also to cross into areas more clearly demarcated from the anthropologists' own cultural world. To take a crude example, the novelist might treat of cannibals in his own work but he would commonly present them as being external to 'his' world, evil and beyond comprehension; the anthropologist's task is to try to enter the cannibals' world and discover the norms and values which enable the social system to exist as it does. Although he can never evade his own culturally defined ways of thought, the superimposition upon those categories of a way of thought anthropological, restricted to a small (but growing) number of people, should make his description of exotic societies more accessible to his readers, by increasing its intersubjectivity. Thus, anthropologists should act as a medium of communication between cultures, both as receiver and transmitter, in Colin Cherry's terms.

Such an object is extremely hard to achieve, but it is the ambition of many social anthropologists, particularly young writers in the subject.

"The work of social anthropology may be regarded as a complex act of translation in which author and translator collaborate. A more precise analogy is that of the relation between the psychoanalyst and his subject. The analyst enters the private world of his subject in order to learn the grammar of his private language .. it [analysis] becomes science to the extent that the private language of intimate understanding is translated into a public language however specialised ... But the particular act of translation does not distort the private experience of the subject and ideally it is at least potentially acceptable to him as a scientific representation of it." (Pocock, 1961, p.89)

"One might characterise social anthropology as the attempt to make the behaviour of alien peoples intelligible by discovering the situation logic underlying it" (Jarvie, 1964, p143)

For Frederik Barth,

social anthropology aims to produce "a map of social conventions of different social situations and what is regarded as suitable for different persons in different situations" (Fredrik Barth, 1966)

Levi Strauss says "all we can expect of either of them (historians and anthropologists) is to enlarge a specific experience to the dimensions of a more general one, which thereby becomes accessible as experience to men of another country or another epoch" (1958, p.17)

It is essential to emphasise that this is the view of social anthropology taken here, since the implications of definitions which derive from those of Radcliffe-Brown (who saw anthropology as a "theoretical natural science of human society, that is, the investigation of social phenomena by methods essentially similar to those in the physical and biological sciences"), maybe totally different. The failure of social anthropologists to attempt to make explicit at least some of their assumptions by stating what they conceive of as the aim of social anthropology has led to much confusion. Among those using network analysis it has meant that the full implications and potential of the method has not been realised.

Working within the view of social anthropology which has just been outlined, I have two aims in view.

One is to show that network analysis has been an important element in the reshaping of British social anthropology which I see as having occurred in the last ten or fifteen years; to suggest some new fields

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in which its use might be an advantage, and the modifications which network analysis requires to increase its usefulness in the act of translation.

The other is to try to show what this change in British anthropology is and why it has occurred. In doing so I shall question one aspect of Thomas Kuhn's 'Structure of Scientific Revolutions', which I find very revealing in almost all other respects. Kuhn says, "the indicator of a mature science is the possession of a paradigm" and that "it remains an open question what parts of social science have yet
**
acquired such paradigms at all".

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I feel that one reason that Kuhn can argue that anthropology and other social sciences do not possess a paradigm and that this statement can be accepted by social anthropologists amongst others, is that there is no need for our paradigm to be made explicit at all, as it is an implied world view, and in trying to locate that of the network analysts at least, I have found that it is very rare for the paradigm to be anything but extremely covertly expressed. This is probably because the anthropologist directs his work to others whom he assumes have the same concepts in mind - they are part of the anthropologist's cultural heritage. This assumption, however, valid in times of "normal science", is not in fact reasonable during a period of paradigm change, since the confusing position exists that different individuals may adhere to incompatible paradigms within the same discipline.

"The pre-paradigm period is regularly marked by frequent and deep debates over legitimate methods, problems and standards of solution, though these serve rather to define schools than produce agreement". (Kuhn, p.48, 1962)

If the overall view of the discipline of each anthropologist is not stated it is impossible for such definition of schools to occur, and anthropologists find themselves working from premises which they take to be, but which are not, in fact, shared.

Kuhn, in the postscript to the 1969 second edition of his book, remarks that it has been pointed out to him that he uses paradigm in twenty-two different ways. Basically he says these break down into two different senses.

"On the one hand, it stands for the entire constellation of beliefs, values, techniques and so on shared by members of a given community. On the other, it denotes one sort of element in that constellation of beliefs, the concrete puzzle, solutions which, employed as models or examples, can replace explicit rules as a basis for the solution of the remaining puzzles of science." (1962, p.175)

In fact, anthropology is undergoing a change of paradigm which has divided anthropologists into structuralists and interactionists, atomists and holists and separated off different university departments along the same basic cleavage. All this is very reminiscent of the period of paradigm change which Kuhn describes as a period in which 'extraordinary research' is undertaken and a time when "scientists have turned to philosophical analysis for unlocking the riddles of their field" (p.87 and 88), "Confronted with anomaly and with crisis, scientists take a different attitude toward existing paradigms, and the nature of their research changes accordingly. The proliferation of competing articulations, the willingness to try anything, the expression of explicit discontent, the recourse to philosophy and to debate over fundamentals, all these are symptoms of a transition from normal to extraordinary research" (p.90-91).

By these criteria, it is evident that anthropology is undergoing a period of extraordinary research, from which a new paradigm will be derived and a phase of normal science will result.

Kuhn later remarks, 'Let us, therefore, now take it for granted that the

differences between successive paradigms are both necessary ~~(pp.102)~~
 (p.102)
 and irreconcilable/ provides an answer to Garbett's problem -

"when I began to work out this lecture I hoped to resolve the conflict between anthropologists focussing on institutions and those focussing on ego-centred interaction. I found that I could not do so. It may be my own weakness or it may be that the subject is not yet ripe for a reconciliation. It may even be that no reconciliation is possible and that this is a problem for philosophers and not for a field anthropologist" (pp.225-6)

(The reference to the possible need for philosophy lends weight to the argument that we are in a period of extraordinary science).

However, network analysis has already been a crucial element in the reorientation of social anthropology which has taken place. As Nadel says, "New tools have been known to facilitate new discoveries. They certainly produce in those who use them a new attitude, a new way of working at things which is probably the decisive step." (1956, p.7)

In British anthropology, the introduction of the concept of network analysis, coincided with the collapse of the old structural/functional paradigm, and the introduction of one based upon concepts of choice, communication, manipulation, exchange, generation of forms and above all process and an emphasis upon the individual, what Harré has called 'the ethogenic way' (See Chapter IV).

My most important and interesting task will be to show that this different paradigm really does exist in British social anthropology, and to illustrate the connection between it and network analysis. My contention is that networks have not been utilised within the framework

of this new paradigm, and as a result the method is not being developed in ways which will make it inspiring to new generations of anthropologists. Some network studies illustrate that this need not be so.

I do not claim to have been comprehensive in my analysis of network studies made by British social anthropologists. I have included studies by non-British researchers and by workers in other disciplines. I hope, however, that I have referred to the major works in the field by British anthropologists. I have tried to consider studies which add to the development of the method, or suggest theoretical concepts which have influenced later network analysts.

2. EARLY STUDIES USING THE CONCEPT OF NETWORK

I shall consider here both J.A. Barnes's article "Class and Communities in a Norwegian Island Parish" (Barnes, 1954) and Elizabeth Bott's "Family and Social network" (1957). A specific debt is mentioned to one or both of these studies by over half the network analysts whom I shall be considering. The work by Epstein and Philip Mayer (Epstein 1961 and Mayer 1961) also seems to me to deserve inclusion in a discussion of pioneering network studies since they pointed out new ways and areas to use the concept.

Barnes is the labeller of the social network concept, and as such is the most significant author. Barnes notes in 1969 that he derived the idea of the total network from Radcliffe-Brown and was influenced by Fortes in developing the idea. In later network studies attention was turned to the theoretical expansion and refining of the concept, and the network had arrived on the anthropological scene. Thus, these early studies are pioneering the use of a concept in the analysis of actual field data derived from very different situations, and presenting varied problems of analysis.

The aims of the different authors are given as :-

"Comprehending all the various ways in which the members of a society specifically interact with one another". (Barnes, 1954, p.39)

"understand the social and psychological organisation of some urban families."(Bott, 1957, p.1)

"The limited scope (of the present book) is to discuss some behaviour patterns of country born Xhosa migrants in East London, (with special reference to the question whether these migrants seem to be undergoing urbanisation)".(P. Mayer, 1961, p. 3)

"to demonstrate the importance of the network in urban social organisation and to indicate some of its characteristics and functions. . . . I take the behaviour they [the texts] describe as the unit of analysis through which I seek to establish other sets of regularities present in urban life. In this respect the present paper looks towards the development of a methodology or systematic approach to the anthropological study of urban communities."(Epstein, 1961, p. 80)

In attempting to compare these four studies to highlight their most salient areas, the most obvious point is that three are urban studies, while Barnes is working in a rural community. Thus, although network analysis is often associated with African urban studies, it, in fact, had its genesis in quite different surroundings.

During the course of the four analyses of aspects of literate, complex societies, each anthropologist finds himself concerned with expressions of prestige and the emergence of social classes. In Barnes specifies this interest - "I used it (network) to describe how notions of class equality were applied". (1969, p.52) He is concerned to see how class distinction can occur in a society which has an ethos of equality as exists in Norway.

Barnes and Bott see class as an ordering of society by those within the society, a concept which exists in the mind and is to a large extent subjective; in contrast, Epstein and Mayer are concerned with the existence of prestige groups which can be ordered and

observed by an outsider according to variables such as degree of "Westernisation". This is probably a reflection of the different situations in which they were working, since Barnes and Bott were both working in societies where prestige differences are played down to some extent, and thus not so clearly expressed for the outsider to comprehend. **

The expression of and adherence to norms of behaviour are of paramount importance in the studies by Epstein, Bott and Mayer. Elizabeth Bott's ideas about norms and ideology are extremely penetrating and are more far reaching than many people who claim to have used her ideas imply. She distinguishes between social norms - what people think are current ideas in some group or category,

Norms of common consent - over which there is actual concensus, and
Personal norms - which are recognised as being private standards.

The important point is made that "Norms are usually only brought forth in times of crisis and conflict, when they are used to justify one's own behaviour and pass judgement on that of others. When nothing much is going wrong, there is no need to state what the norms are." (p.202) This idea is implied in many later network analyses which tend to focus upon a situation which is problematic to those involved in it. The

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However, the emphasis is still laid firmly upon the emic. P. Mayer says "An alternative [to Gluckman's formulations] is to think of town rootedness as something to be apprehended from the migrant's own point of view" (1961) p. 9. And Epstein's analysis is using data which derives directly from Chanda's own experiences rather than an external observer's viewpoint.

fact that norms are often inconsistent in any type of society is preserved as a refutation of the assumption which is often made "that discrepancies and conflicts of norms are a sign of social change - an assumption that assumes the "normal" state of the social systems to be one of harmony and consistency. But norms are seldom consistent even in small scale societies that are changing slowly and it seems likely that certain types of conflict are endemic in a social system." (p.211)

A third crucial notion which Bott set forth specifically is "the view that the external social environment permits much choice, and within broad limits individuals can construct their own environment in accordance with their own conscious and unconscious needs. Norms and ideology which had previously been interpreted as external rules internalised by the individual, she [Bott] now began to regard as in part constructed by individuals." (Bott, 1957, p.33.) This theoretical stance taken by Bott has been ignored by practically all the succeeding network analysts, and it is this which accounts for the somewhat sterile applications of the idea which have appeared. It is a stance which clearly owes a great deal to G.H. Mead (whose "Mind, Self and Society", is 1934, mentioned in the Bibliography) and symbolic interactionism, and also to Simmel.

Bott's observation that those families which exist within a close-knit network - in which most of the component members know one another - have less diverse norms to choose between, provides the basis of P. Mayer's

explanation of the 'encapsulation' of Red migrants. In town, although the "factor of personal choice is in full operation" (1961, p.14) the Red 'stretches' his rural network, rather than expanding the network in town as the School man does.

A.L. Epstein¹ introduces the notion of "effective network" which "consists of clusters of persons fairly closely knitted together. The limits of such clusters - to use Barnes' term - are vague, but in some situations they show an exclusiveness so marked as to suggest the existence of groups in the strict sense, and to point to recognisable divisions within the community". This he contrasts with the "extended network" which "tends to cut across such divisions" (Epstein, 1961, p.56) The distinction was used by Epstein to describe how norms percolate down through a social system. The apprehension of choice is important in this study since Chanda's network is a result of picking individuals from certain categories - kin, tribesmen, prestige groups - according to Chanda's whims.

Social control is discussed in all these papers - through the pressures exerted by networks, and Barnes specifically discusses the political processes of committees as particularly cogent in this society based upon face to face relationships. Mayer also describes the adaptation of the migrant to the town as a resocialisation through the network chosen when he moves into the town.

As well as similarities in subject matter, the methods of each early study are of interest. All four concentrate upon the "free spheres

of personal life and leisure - particularly the domestic, kinship, recreational and religious fields" (P. Mayer, p. 8), as being the areas - interstitial to institutions - where choice and thus network analysis are most relevant. Barnes, in fact, apparently envisaged the social network as being made up of only these informal links (a view which he has since revised - 1969, 1970)

Bott, Barnes and Mayer, although all basing their analyses upon specific field work, do not use the network concept as a means of presentation of data.^{**} This is left to Epstein, who follows the movements of an African around town and asks him to record his social interactions. In this area, as well, the later network analysts have superceded three of these four early studies in that there is a tendency to try to present specific examples of social networks, though this is still true of only about half of all studies which use the idea of social networks.

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This allows a vagueness to exist in the definitions used by the authors:-

Barnes - "Thus the social network in Bremnes is largely a system of ties between pairs of persons who regard themselves as approximately social equals" (1954, p.44)

Bott - "A network is a social configuration in which some but not all of the component external units maintain relationships with one another. The external units do not make up a larger social whole. They are not surrounded by a common boundary" (1971, p.216)

Epstein - "The network as a whole, therefore, provides a correct or uniform structure composed of interpersonal links which spread out and ramify in all directions, crisscrossing not only the whole of the local community, but knitting people together in different towns and the town and country." (1961, p.36)

Mayer - "The network is the total of ego's interpersonal relationships with other individuals. In any particular society the individuals concerned do not constitute a group in the sociological sense; they form something which like a kindred can only be defined with ego as the central point of reference." (1961, p.9)

The split between those who visualise the social network as ego-centric (Bott and Mayer) and those who do not (Barnes) is apparent already. Also the use of a theoretical concept which is not specifically defined socio- or ego-centric but in practice becomes ego-centric (Epstein).

In spite of later developments it is quite remarkable how wide an area these four authors covered between them, and how accurately their interests forecasted those of later network analysts.

To recapitulate - of the four studies, three occur in urban situations and one in a rural community, a ratio which probably still persists in network studies.

All were in complex societies - which whilst not necessarily true of later studies, is predominantly the case.

All are concerned with the emergence of class and other "groupings" in society; (network analysts are now particularly interested in ethnicity).

Norms and social control are discussed at length.

Crisis, choice and conflict are emphasised in Bott's, Mayer's and Epstein's studies, though not in Barnes's

The individual's viewpoint is an aspect of great importance in defining class groups, urbanisation and, thus, the relationship of the individual or group and its environment is stressed.

The only really new ideas which seem to have appeared in later studies (apart from the modifications mentioned before) are the emphasis laid upon political manoeuvring which is an out-growth of an interest in choice, conflict and crisis, "the action frame of reference" and the generation of social forms, which Elizabeth Bott pointed out in 1957, but which has been overlooked for almost ten years.

Thus, a close examination of these early studies clearly illustrates the future direction of network analysis, including some less attractive aspects, such as Epstein's claim that "the detailed evidence of the narrative which follows puts the reader in a position to check my own analysis and where this is inadequate to suggest alternative and more satisfactory interpretation of the material." (See chapter V)

The later work of these authors and the areas of study which they have particularly inspired are also of interest. Bott has since turned to psychoanalysis and so has not produced any more network studies until her theoretical 'Reconsiderations', written for the second edition of "Family and Social Network" produced in 1971. Several restudies to test her hypothesis have been produced in Britain and America and she is frequently mentioned by network analysts but the wider implications of the original book are rarely mentioned, as Gluckman has remarked in the preface to the second edition.

Barnes, who became Professor of Sociology at Cambridge in 1969, has produced no further network studies using field data, but he has written two articles (Barnes, 1968, 1970) refining the idea of network

and attempting to give it specific mathematical relevance (the timing the Barnes's articles is evidence of increasing interest in the concept). Again tribute is paid to his early article in many later studies but it seems to be too early (or too difficult) for applications of his mathematical uses of the concept to appear.

Epstein has written a network study (Epstein in Mitchell 1969) concerned with a scandal in Ndola, in which he attempts to document his earlier ideas on the diffusion, maintenance, and sanctioning of norms in urban situations. Apart from this work he has abandoned the network concept.

P. Mayer has written two articles which are concerned with networks and urbanisation at a wider comparative level than his book (a second edition of which has just appeared - 1971). There is a considerable interest in ethnicity and socialisation at present and a great many of the ideas being explored were first presented by P. Mayer in 1961.

a) Sociometry - M.G. Smith's 'Stratification in Grenada' 1965

Running parallel to these specifically anthropological developments in the 1950's and the early 1960's is sociometry which involves the use of experiments and mathematical techniques to explain human behaviour within groups.

This has clearly also been an important influence upon later network theorists, as is evidenced by the fact that of 130 references cited in J.C. Mitchell's 1969 symposium, 36 are to basically sociometric sources, of ^{which} ~~these~~ 23 are pre-1960. This interest and mode of analysis is clearly a formative influence.

An early anthropological study which uses these techniques is that of M.G. Smith.

I intend to discuss this in some detail here, since it is the earliest statistically oriented network study made by an anthropologist.

In contrast to Barnes, Bott and Mayer, Smith used the network concept in a very formal way in fieldwork carried out in 1952 - 53. He attempted to test J.S. Furnivall's theory of pluralism and Talcott Parsons's theory of social action, by demonstrating the presence or absence of a common value system, which is a functional prerequisite for the existence of society according to the action theorists. **

Smith was looking for evidence in the form of a "discontinuous status order, characterised by abrupt cleavages between component sections that are distinguished as genuine status continued by their different systems of values, action and social relations" - to validate his support for the theory of pluralism.

In order to obtain this he examined Grenada - a tropical colony in which the main population components were black, brown and white, a simpler type of the colonial society with which Furnivall was concerned. Smith's study was of the élite only, since folk and élite categories were mutually exclusive and this provided a useful way of limiting the study's scope. He was expecting that among these main sections,

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Pluralism involves the co-existence of incompatible institutional systems and this is reflected in the fact that there is no status continuum, based upon common values, which is generally recognised throughout the society concerned. It is, in fact, a society in which "sharp differences of culture, status, social organisation and often race also characterise the different population categories which compose it. An important feature of this societal type is the subordination of the majority to a minority which is also culturally distinct. The conditions of dominance and subordination are expressed institutionally as in interpersonal relations."

differences would possibly distinguish "cultural sections" rather than social classes.

The field methods aimed specifically at "objectivity", "appropriateness" and "consistency", with the introduction of minimal predicates. The use of statistics to express the values underlying the data obtained was also important.

The information used for the analysis was a series of rankings of the 444 individuals contained in the Grenada Handbook and Directory of prominent individuals (403 ratings were in fact usable). These people were ranked by 19 members of the élite, according to deliberately vague instructions which produced a variety of responses structured into 313 cells which were numbered, lettered or occasionally described. These were amalgamated to produce a single scale on which all 403 individuals were ranked. This status system, expressed in numbers from 0 to 100 was the independent variable throughout the study. Networks were drawn on the basis of association into cliques (which are "stable, bounded groups of friends, most of whom are not kin") with cores (intimate friends, centred to the group) and periphery areas. These structures were located by recording the number of times that the 19 informants mentioned the existence of a clique containing particular persons. As a result the cliques could be given an absolute numerical rating - the frequency of report which indicated the intensity of the relationship involved and enabled the core and the affiliate members of the cliques to be identified. 140 persons were included in the cliques, which occurred in 23 clique clusters (with overlapping or

common cores). These clique clusters were each located on the status continuum by means of a mean status score calculated for each one.

The relation between status and association was further explored by an analysis of "clubbing" on the island. Wealth, occupation, descent and marriage were all examined with reference to status, using data gained from inventories of directorships, income and occupation and observation. A genealogical study of 83 descent lines was also analysed as a dependent variable.

The theory of pluralism is proved since the expected discontinuities are found expressed as a division of the élite into 4 strata, which do not relate to any one variable and express value dissonance even within the élite themselves. The break between the élite and folk sections is also demonstrated to exist.

More important, for my purposes, however, is the fact that Smith has successfully "illustrated" a method of the field study and analysis of social stratification that seems especially appropriate to small societies or to small segments of large societies and which uses network analysis as an important element of the method as a whole. In this particular study networks are used in an extremely literal and formalistic way, which clearly departs from those approaches used by the other anthropologists I have so far mentioned. Here networks take on the role of a purely analytical device, not adding to hypotheses

or explanations as such. In spite of the lack of emphasis laid upon network theories by Smith, the method reaches a level of statistical sophistication and refinement, which has still not been approached in other anthropological studies using network analysis.

Later work, by Manchester social anthropologists particularly, has aimed at the use of sophisticated mathematical techniques, in a way which derives from sociometry, but Smith's study is rarely if ever cited (for instance, not in Mitchell's 1969 symposium). Thus, although it in fact points the way in which some later developments were to go, it cannot be said to have specifically been an influence upon such later studies in the way that Barnes, Bott, Mayer and Epstein are.

3. EVIDENCE OF INTEREST IN NETWORK ANALYSIS

In order to demonstrate that network analysis has become an important element of British social anthropology, since the publication of the studies mentioned before, I have chosen some quotations from anthropologists in Britain and elsewhere, and also from some members of related disciplines.

Remarks by network analysts themselves (in chronological order)

"Another helpful analogy which I believe makes the first major advance in the language of sociology since role, is that of 'network'." (Frankenberg, 1966, p.242)

"A detailed study of personal networks in urban studies promises to yield important insights into the social behaviour in towns." (J.C. Mitchell, 1966, p.55.)

"The network concept is indispensable in discussion [of] those situations where, for examples, the individual is involved in interpersonal relations which cut right across the boundaries of village, subcaste and lineage" ... "It is appropriate where enduring groups such as parties and factions have not formed and where individuals are continually required to make choices about whom they should look to for understanding, help, influence and guidance." (Srinivas and Beteille, 1964, p.166)

"The analysis of social change in terms of social networks (particularly with reference to urban communities) seems to be the replacing among anthropologists, the former more generally accepted method of analysis in terms of institutions and groups." (Oeser, 1969, p.30)

"In so far as British studies are concerned, the use of 'networks' as an analytical rather than a metaphorical concept, dates only from 1954. Since then there have been a few studies which have made extensive use of it but the idea is becoming more and more popular." (J.C. Mitchell, 1969, p.1)

"In considering my field research data on the Ndendeuli and in working out the exposition presented in the foregoing chapters of this book, it seemed to me that the most satisfactory frame of reference, in a general sense, was that of 'network'. This

is a term, which along with similar cognate ones (web, mesh, grid, reticulation and the like), that anthropologists and sociologists have often used in the past, principally as a convenient metaphor or as a suggestive analogy.." (Gulliver, 1971, p.345)

"When we first used the idea of network I do not think that either John Barnes (1954) or I realised it would become fashionable in British social anthropology," (Bott, 1971, p.316)

The opinions of some people who have not worked specifically with networks on their importance in British social anthropology.

"The difficulties met by social anthropologists in explaining all the problems of the division of labour in complex societies, can be most clearly seen, perhaps, through an analysis of the concepts they employed and coined for the study of complex societies, once they found that their traditional techniques and concepts did not suffice to deal with all the problems inherent in the material. The most important concepts evolved for these purposes are: 'network', developed by Barnes, 1954 (also used by Bott, 1957), 'social field', initially developed by Fortes and Gluckman and his students, 1958, and 'social organisation', as developed by Firth, 1951." (Eisenstadt, p. 208.)

"It is only perhaps the concept of network that to some extent provides a potentially new analytical tool. It clearly describes or points out the existence of some differential relation between different people who are not organised in corporate groups, and it may help in the analysis of the relation of different persons, acting in such a network, to different types of social roles and institutional frameworks. In this way the concept of network does at least point out one way - beyond embedding in the structure of concrete groups - in which the various regulative mechanisms can be organised." (Eisenstadt, 1961, p 209)

"We see here (Barnes, 1954) the initial usefulness of a controlled metaphor expanded into a partial analogy for ordering and clarifying social data in a situation at the individual level where little is known. Since, moreover, the 'network' can be studied without reference to physical or social boundaries, the method seems, at last, to escape from presuppositions of closure and equilibrium. It has the additional advantage of supplying a suitable base from which the study of role and role expectations might proceed." (Reader, 1964, p.20)

"These scholars [writing in A.S.A. 3, and 4.] are finding that theories based on concepts of groups, groupings and associations and dyadic relationships are inadequate for their problems: the network and other forms of quasi-groups, which are ego centred, are becoming more significant in bridging the gap between the structural framework and individual action." (Gluckman and Eggan, 1966, p. xxxv)

"The point is that a detailed study of networks helps us to isolate social fields and provides a very useful tool for investigating local communities."(Pahl, 1969, p.290)

"The notion of social network may be applied usefully in many analytical contexts, but in political studies it is particularly relevant where there are no sharp boundaries within the society being investigated, or where there is no obvious division between the leaders and the followers." (Swartz, 1968, p 34)

"I believe that the most important single contribution of the Africanist studies under review is their focus on ego-centred networks and fields."(Kushner, 1969, p.95)

"This [network] is an in word at the moment." Mair, 1971, p.969

"At the time [of field/work] it did not occur to me to make a systematic study of personal networks."(Lloyd, 1971) (The implication being that in the 1970's this would be a fairly automatic procedure).

4. THE DETERMINANTS OF THE INTEREST IN NETWORK ANALYSIS

My aim in this section is to consider the modes of thought which were contemporaneous in social anthropology with the appearance of network analysis. I am not concerned with their correctness or otherwise - for instance on the point of the extinction of anthropology's traditional subject matter of primitive societies. I am merely trying to locate particular currents of opinion which existed and provided a context of justification for the method's appearance. As a result, I am involved with the opinions of network analysts rather more than those of other accepted authoritative anthropologists of the time, although clearly network analysts must relate to such a mainstream of thought.

a) Change in anthropology's subject matter

"It is no accident that Bott, Adrian Mayer and P. Mayer, and Epstein, Barnes and other contributors to this volume should have turned to the notion of social network in their quest to understand behaviour in the social situations they studied. For the structure of social relationships of the rural parishioners of modern Norway, the families in London, the local politics in an Indian town, or the activities of contemporary African townsmen accords so little with the structure of communities commonly described in anthropological writing, that some other approach seemed essential." Mitchell, 1969, p.48.

"To understand the status of the network concept, I think it helps to ask when and why it was adopted. I think it was adopted because it seemed to offer a way out of the stalemate that social anthropology appeared to have got into by the late 1950's. The structural/functional vein had been thoroughly mined by the elegant studies of Evans-Pritchard, Fortes, Gluckman and their numerous colleagues and students. Discontent was in the air, What about social change? What about complex societies? What about variability, choice and the choosing individual?" Elizabeth Bott, 1971, p323

Elizabeth Bott uses here a very mild term to describe the state of anthropology at this time as seen by its practitioners. It was for many of them a time ~~of~~ crisis.

This despondent view was precipitated by various factors, the two most crucial being the apparent disappearance of anthropology's traditional subject matter, (which resulted particularly in new problems of defining social anthropology vis à vis sociology), and the apparent failure of structural/functional analysis, which, as Evans-Pritchard put it, 'reigned' in social anthropology in England in 1950, to cope with situations of change.

Boissevain credits three influences with causing the shift in orientation towards the interacting individual, apparent in British social anthropology:-

- i) "the growing attention social anthropologists are giving to complex societies",
- ii) "as the existence of these non-groups in complex western societies which have long been under anthropological observation, such as India and even in primitive societies"; (a process I hope to illustrate),
- iii) "the concept of ego-centric interaction systems is becoming increasingly less alien to anthropological theory" (1968, p.543)

Garbett has cited similar factors, seeing the process of re-orientation occurring "as familiarity with the main social forms, and as the societies which were studied became more heterogenous as they underwent rapid social change, attention turned to examining ways in which individuals interacted within a system. Researchers focussed primarily on the means by which individuals attempt to

resolve conflicting principles of organisation and to cope with discrepant values. It is also significant that this analytical development occurred, in the main, in central Africa where societies lack lineages and where the mobility of populations and the fluidity of groups is a marked feature." (sic.) (p.219, 1970.)

These network analysts see the disciplines changing subject matter as bringing about a reorientation in British social anthropology, one aspect of which is the emergence of the network concept. The change in subject matter brought about a reappraisal of traditional anthropological theories at the same time.

b) The Disappearance of the 'Primitive' Society

Social anthropology has frequently been defined as being concerned with a particular type of society which served to demarcate its field of study from other disciplines. For instance, Evans-Pritchard defined social anthropology in 1951 as being that "branch of sociological studies which chiefly devotes itself to the study of primitive societies." Anthropologists have long feared the demise of such primitive or preliterate societies, which has always been regarded as inevitable.

"Ethnology is in the sadly ludicrous position, not to say tragic, that at the very moment when it begins to put its workshops in order ... the material of its study melts away with hopeless rapidity." (Malinowski, 1922.)

By the 1950's in Britain - where social anthropology has directed its attention to social relationships (rather than culture which Americans have tended to see as the sphere for anthropological studies, or symbolic systems, which have attracted the notice of the French) - the loss of a defining subject matter was seen to be producing a situation in which the distinction between sociology and social anthropology could no longer be upheld. **

"With the disappearance of the conditions considered the matter of anthropological study in Africa, it is likely that the study of pre-industrial societies will be taken on by the historical disciplines whereas contemporary societies will be studied by sociology." (Maquet, 1964, p.48)

Firth had implied by his use of the term 'microsociology' (1951) that the possible future for social anthropology lay in becoming a specialist branch of sociology concerned with the close scrutiny of small parts of societies which were being analysed simultaneously on a different scale by sociologists.

Since the subject matter of sociology (if defined as Western society) is guaranteed (hopefully) to flourish, the prospect of

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In fact, such pessimism over the future of social anthropology in Britain was quite misplaced, since the discipline attracts new students and embarks on new research programmes with what seems to be an increasing facility. The emphasis on subject matter was unnecessary, since, as has been recognised for many years in the pure sciences, in the social behavioural sciences, e.g. Gluckman and Devons 1964, it is the types of relationships between the objects under study, rather than the objects themselves which serve to define a discipline, and anthropology has a unique way of approaching such relationships.

becoming sociologists attracted social anthropologists a great deal at this time, by aligning with a discipline which to them clearly had a great future ahead, it was hoped to escape the awful prospect of extinction which anthropology and primitive tribes faced together. **

Thus, there were various attempts to integrate the two studies which further blurred the boundaries between them. An example of these was Goody's (1966) formulation which dismissed as 'xenophobic' any attempt to draw lines between social anthropology and sociology, and using Radcliffe-Brown's conception of social anthropology as comparative sociology suggested three main interlocking fields of comparative sociology:-

1. The Sociology of developed societies.
2. The sociology of developing nations.
3. The sociology of simpler societies.

The last of these is a type of social archaeology.

As well as being forced, by an increasingly elusive subject matter, to adopt the label sociologist, some anthropologists felt that "the very term 'anthropology', with its French counterpart ethnologie ... are frowned on in many quarters, they are suspected of being tinged with colonialism. New research projects are not always encouraged

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There is also an undeniable fact that the two disciplines are closely related which justifies such a movement.

and some African authorities manifest more distrust than enthusiasm when asked to support or facilitate anthropological field works". (Maquet, 1964, P.47)

At least one major exponent of network analysisⁱs prefers the terms sociology to anthropology:

"There seems to me to be no distinction at all between sociology, as the study of societies and social action in general, and social anthropology which has traditionally spent most of its energy in studying other peoples organised in societies which appear to be different to our own. At one level, that is to say, the only distinction between them is an historical one, which can be explained in the terms of the growth of imperialism in the nineteenth century and the need to establish some kind of understanding of exotic peoples that Europeans came into close contact with during that period. So it's a continuation of an anachronistic form of discrimination." (J.A. Barnes, 1971)

Despres, who specifically saw this period as one of the major crisis, described the causes as "The impending extinction of the so-called primitive societies in which anthropologists have done most of their work and the growing realisation that anthropology's future as a scientific discipline depends upon the ability of anthropologists to define and undertake meaningful research in so-called primitive societies". (1968, p.14)

Kingsley Garbett has also pinpointed the importance of subject matter as a positive factor encouraging the use of ego-oriented approaches.

"It is also significant that this analytical development occurred in the main, in Central Africa, where societies lack lineages, and where the mobility of populations and the fluidity of groups is a marked feature" (Garbett, p.219, 1970.)

For the majority of anthropologists a more negative view prevails - in that a fear of the disappearance of subject matter forces a reappraisal of methods and theories. Such a view is still widespread.

"The present 'crisis' in anthropology has been occasioned by two sets of events in the wider society. First there is the virtual disappearance of the primitive world which in the past provided the discipline with most of its data, as well as the major inspiration for its key concepts and theoretical ideas; second, there is a growing demand for greater anthropological involvement in and application to contemporary social problems," (Manners and Kaplan, 1971, p.19)

It is in this context that the popularity of the network concept must be understood.

c) The Theoretical 'crisis' of anthropology

Mitchell has written, "the inadequacy of this [structural] approach became apparent when social anthropologists began to direct their attention to more complex societies and as Bremnes, to urban communities in India and Africa, and to small-scale societies which lacked single pervasive structural characteristics in terms of which their morphologies could be predicted". (1969, p.9).

Network analysis appeared at a time when the theoretical basis of anthropology for the previous two decades was being discredited.

The validity or not of the attacks made upon the structural/functional paradigm is not the problem for the present thesis. The concern here is to point to the areas in which the old paradigm was considered inadequate, and to point out that it was these areas that network analysis was claimed to be able to tackle.

i) The Perceived inadequacies of structural/functionalism

The structural/functionalist's paradigm has been the subject of many critiques and so I intend to point out only the areas in which its inadequacies seem to me to have ~~led~~ specifically to the development of new approaches and eventually the production of a new paradigm in social anthropology.

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Malinowski described the aims of functional analysis as:

"the explanation of anthropological facts at all levels of development by their function, by the part which they play within the integral system of cultures, by the manner in which they are related to each other within the system, and by the manner in which the system is related to the physical surroundings." (Ency. Brit., 13th Edition)

The result should be a theory of 'purely empirical nature'.

Radcliffe-Brown's view of social anthropology has been outlined as an attempt to produce statements about the persistence of social systems and regularities of social change by the application of methods "similar to those used in the physical and biological sciences." 1951.

Critics have tended to emphasise the holistic view of society in which order prevails, and a tendency to ignore the individual, which are claimed to be a part of the approach to society of structural/functionalists.

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K. Garbett (1971, p.218) has considered the inadequacies of a structural approach from the actor-oriented perspective so I shall not repeat this here.

"It is rather the case that the functionalist terms of their [anthropologists] analyses, their preoccupation with groups and with relations between groups, left out of account the apprehension these societies had of the individual : the social forms were not seen as in a sense coping with duration... The situation has been reached when 'there is almost an element of abuse in the epithet 'a structural/functional study'." (Gluckman, 1968, p.234.)

As the theory as a whole came under fire, the concepts derived from structural/functionalism were also questioned and often rejected. Notable among the notions which have undergone close scrutiny is that of social structure.

"This concept of social structure sprang from the work of anthropologists working in relatively static and ethnically homogenous communities. Few such communities are being studied by anthropologists." (Gutkind, 1965, p.52)

Often the solution suggested to the problem of structure has been to combine the idea of structure with some new concept. Network analysis is seen by many of its adherents as providing a means of rectifying the faults in studies, using the idea of structure derived from the structuralist paradigm and adding to it the elements of individual choice and manipulation of structure which are so apparent in societies today.

"An important point in the use of the notion of social networks in the interpretation of field data is that it is complementary to, and not a substitute for, conventional sociological or anthropological frameworks of analysis. It was introduced into British social anthropology in the first instance particularly because the conventional categories of structural/functional analysis did not appear to be adequate when anthropologists began to make studies outside the ordinary run of small-scale, isolated 'tribal' societies." (Mitchell, 1969, p.8)

"Thus structural/functional analysis often seeks out the regularities in behaviour, concentrating mainly on that social action which is constituent with the overall perceived morphology of the social system. Because of this, structural analysis often disregards behaviour which is irregular and not consistent with the general structure of the society studied." (Kapferer, 1969, p.183)

The implication of this being that new methods can overcome this inadequacy of structural analysis.

Another notion related to the structural/functional approach which has been severely criticised, is that of the group. The analysis of behaviour in terms of group membership has been found inadequate in urban and other complex situations where the search for groups has proved unsuccessful. Network analysts have justified the use of the concept of networks as superior to the idea of groups in many situations. Srinivas and Beteille in considering the relationships between villages in India see that mobility - vertical and horizontal - now makes the idea of group inadequate. Gulliver (1971) has made the same point; Barnes says that the concept was "developed in social anthropology to analyse and describe those social processes involving links across, rather than within group and category limits". (1969, p.54.)

Bott says specifically that she "found the network idea necessary because the familiar concept of group and corporate group of traditional anthropology were not entirely adequate to the field data I was dealing with". (1971, p.313.)

Yablonsky has remarked upon the existence of a group fulfilling prophecy "whereby the very orientation of the social anthropologist towards searching for enduring groups, in terms of which to analyse society, has created such entities in analysis whether they exist

or not on the ground or in the minds of the observed." (In fact, it is probable that such a conceptual scheme had a greater validity in the past, but that it has outlived its usefulness. A total cynicism over such a point as this eliminates all anthropological writing as being the imposition of the anthropologist's categories of thought upon the observed society and is clearly very unproductive.)

In place of the group, network, quasi-group and faction, have provided means of analysis in many situations, particularly in 'large complex and changing societies' where structuralism is inadequate (Srinivas and Beteille). Gulliver's study (1971), amongst others, demonstrates that such an approach has a wider potential. **

Network analysts propose to concentrate upon the interstitial areas of social choice, manipulation and interaction which either cross or exist outside the institutional and group limits, which were the concepts of the previous structural/functional studies. The method has thus been used particularly in situations of change, urbanisation and political activity which involves areas beyond those defined as "political" in the past. Gulliver has also found it useful in discussing a society of the "traditional" anthropological type where he was "seeking to avoid the past rigidities of structural/functionalism and presumptions of equilibria." Gulliver, 1971, p.5.

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As the major concepts of structure and group had to be rethought, other related ideas have been rejected or reconsidered. Defining areas of study has become more problematic and the boundaries between ethnic groups have become of particular interest.

It would seem that the use of network analysis implies a concern to overcome the inadequacies perceived to be inherent in a structural/functional analysis, which requires a concern with facts of a rather different order from those commonly regarded as the basis of an anthropological study. The nuances and subtleties of social interaction are now the focus of interest. This type of reorientation is at the basis of T. Kuhn's study of scientific revolutions - that such a revolution occurs not simply because of the introduction of new data, or the refutation of a theory, but because the whole view of what is admissible as fact undergoes drastic reorientation.

An analogy with linguistics is useful, since the essence of the Chomskian revolution is the attempt "to construct models of what it is the native speaker knows about the structure of his language - moreover what he knows intuitively." (J. Thorne, 1971.) The current paradigm of British social anthropology admits into the realm of fact more than the purely observable actions which Radcliffe-Brown emphasised so much. The intuitive knowledge of a situation held by the participants is what is sought - the recipe knowledge of Luckman and Berger - which constitutes the social stock of knowledge.

Thus the greatest potential of network analysis has been missed by those who insist that the observable 'facts' are the only ones with which the social anthropologist should be concerned. As Bailey has put it (1970) - we do not wish to be merely where the action is but where the mind is. Network analysis can help us

to attain this end by ordering our approach to an apparently confused and complex situation. In this respect it has potential, but before this can be fully utilised, it must be coupled with the new ways of thought which are not those of a modified structural/functionalism.

It is only by using a radically different approach to the study of society that British social anthropologists will be able to escape the constraints of a structural/functional type of analysis. Among the network analyses actually carried out, the main failings lie in a hesitancy or inability to make the break with previous approaches and to accept and use the full implications of such a method.

"To draw attention to the 'somewhat narrow exegesis by Radcliffe-Brown of Durkheimian sociology' is not merely an act of historical inaccuracy. It can be shown to have had finally a severely limiting effect upon social anthropology and given birth to conceptual distinctions which have occasionally degenerated into dogmas. The very nature of the societies studied under his influence precluded the inadequacies of his theory from being revealed ... After Radcliffe-Brown, social anthropology in England could only advance by rejecting his theories, not by developing them." (Pocock, 1961, p. 60 and 62)

It is my contention that the inconsistencies and inadequacies of certain previous network studies may be traced to a failure to reject the theories of Radcliffe-Brown and in fact a desire to justify the network concept by reference to his designation of social structure as an "actually existing network of relations".

The motivating force behind the adoption of the new technique of network analysis was for many "a growing dissatisfaction with structural/functional analysis and the search, consequently, for alternative ways of interpreting social action." (Mitchell, 1969, p. 1.)

This dissatisfaction was most apparent and was in many cases instigated by the specific inability of structural/functional analysis in coping with social change.

ii) Problems in explaining social change as precipitating the disillusion with functionalism.

"As might be expected, the failure of the functionalist view comes out most clearly when we are faced with situations of upheaval and radical change." (Pocock, 1961, p.110)

"The empirical value of Radcliffe-Brown's work decreased as his statements about the nature of society became more dogmatic: societies were natural organisms and their study in terms of functionalism and integration precluded the possibility of discussing the evident fact of change. The application of individual psychology to social phenomena was rightly rejected, but the individual for whom words and action have meaning, was eliminated with it; a natural science must not concern itself with speculative history, therefore history and the methods of historians were irrelevant. Empiricism became speculative in the worse sense and there was an evident need to return to the authority of human choice." (Pocock, 1961, p.72)

"Contemporary sociology is wedded to the functional analysis which is satisfactory for the study of social phenomena within a given structural context but which does not explain change." (P. Cohen, 1968, p. 174)

As a result of the dominance of ^a structural/functionalism paradigm

"the analytical contribution of modern anthropology to the understanding of social change has been limited." (F. Barth, 1967, p.661)

The equilibrium model^f derives from structural/functional approaches to the study of social change, but by 1964 Reader was able to write:

"Little more can be done with the equilibrium social structure model in the study of social change. It remains useful in cases of Wilsonian 'ordinary' change, which can be contained within the structure, in other words in repetitive social systems (Gluckman, 1942). By the techniques just mentioned (those of Evans and Pritchard) including an excursion into

history, the model may be extended to cover cases of 'radical' change providing the changing systems can be regarded as holistic, 'closed' and in successive states of quasi-equilibrium. These conditions, however, break down in many communities, noticeably those in modern emergent Africa. Two problems then arise, 1) the setting up of new models for apparently disintegrated, non-homogeneous communities, and 2) the treatment of continuing social change within them." (Reader, 1964, p.14)

It is not relevant to the present discussion to embark upon an attempt to justify or refute the charge that structural/functionalism is unable to cope with situations of social change. From the point of view of many social anthropologists, in the late 1950's and the 1960's it was a fact that structure/functionalism was inadequate in this area and so the search had to be made for a new theoretical stance, which could overcome the problems. Network analysis was one of the products of this search. **

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It is often argued that a theory which explains the persistence of social forms must provide an explanation for situations of change and it would seem that this must be logically true. Thus, the exploitation of this lack in structural/functionalist analysis can be seen as rationalisation ex poste facto.

iii) General theoretical discontent

As well as a specific concern over the validity of the structural/functional approach in the consideration of changing or complex societies, anthropology has been castigated for its lack of theoretical development. This is sometimes said to be because the discipline is a relatively new one which has not yet developed its own theories. The lack is also blamed by some upon the effect of previous approaches which stressed the 'fieldwork mystique' and inhibited comparison between societies.

Gellner writes:

"anthropology is facing a crisis in any case. This crisis arises roughly from the fact that Malinowskian anthropology has brought forth a very rich harvest in the form of knowledge and understanding of individual societies. It has not been so fertile as some might have hoped in providing general comparative theories." (1964)

Emmet and MacIntyre in their review of the state of the social sciences claim that:

"British anthropologists for the last generation at any rate have concentrated on field studies, using structural/functional concepts in order to see each system studied as a system of interrelated situations. This has led to detailed particular studies, and also to caution in producing cross-cultural generalisations. Where there has been talk of general laws this has been a programmatic hope rather than an actual attempt at formulating and testing such laws." (1970, p.xi)

Manners and Kaplan similarly criticise the anthropologists' theories:

"Anthropologists use the term theory in a great variety of ways - almost whimsically - sometimes as a synonym for a concept or as a synonym for an inductive generalisation, or for a model (often in itself a term used in a number of different ways) sometimes merely to lend dignity to the obvious." (1968, p.4)

One of the attractions of network analysis is that it seems to offer a way of ordering data so that it can be readily analysed and compared with that of other field workers, to produce generalisations and laws and thus eventually an empirically based deductive theory.

iv) Quantifications possibilities

Mitchell suggests that the second major factor in encouraging the adoption of the network concept (the first being for him the failings of the structural/functional approach) is "the development of non-quantitative mathematical ways of rigorously stating the implications entailed in a set of relationships among a number of persons." (p.1., 1969.)

This factor is ^{not} so important as those of subject matter and theoretical orientation, since it motivates only some of the network analysts in their studies and is not, as yet, very fully developed by any of them.

It is, however, a part of the desire to align anthropology with the 'hard' sciences such as physics and biology which are widely seen as having more prestige. The idea of anthropology as a natural science is a throwback to Radcliffe-Brown and tends to stifle rather than develop the usefulness of network analysis or any

other anthropological work. I shall consider the implications of the scientific paradigm, and the related desire for for quantification in detail later. For the moment it is sufficient to point out that the desire to produce quantitative data which would enable comparisons to be made has given impetus to the development of network analyses. The work of Wolfe, Mitchell and Barnes is particularly indicative of this.

d) Paradigm Change within Anthropology and Related Disciplines

Attempts have been made to gloss over the reorientation currently occurring in British social anthropology and other social sciences,

Gluckmann and Eggan wrote:

"There are many new ideas in these essays (A.S.A. monograph 4) but no author has attempted to put forward an altogether new theoretical approach or even to recast the basic orientations of the subject ... The basic orientation in these essays is therefore still the acceptance that the events which comprise human behaviour exhibit regularities whose forms are mutually interdependent, over and above their interdependence, in the personality-behaviour systems of each individual actor. As Radcliffe-Brown put it, there are social systems whose structures can be analysed. An interdependence of cultural institutions each of which has an elaborate structure would perhaps be the parallel Malinowskian formulation." (1966, p. xxx.)

This rather complacent view of what the younger generation of British social anthropologists was up to seems to have altered in Gluckman's article on the equilibrium model in the analysis of social change written two years later, where he says that the answer to the problem of why structural/functional analysis has been discredited "may in the widest terms, be that each new generation wishes to outdo its predecessors, and wholesale condemnation is an easy way of beginning." (1968, p. 234.)

In fact, as I have argued previously, and as Pocock has pointed out, it is essential in any discipline if a school is to progress and make a contribution to the discipline involved, that it asserts the primacy of its own theories. The attempt to build upon previous ideas is mistaken and only leads to inconsistency.

This view of scientific progress has gained wide acceptance since T. Kuhn's book set it out so clearly. There is competition between schools of thought in academic disciplines to define the area of study, the 'facts' which are relevant, and the problems with which it is concerned. One school presents an approach which becomes the paradigm of the discipline at the expense of previously held views. This gives a different complexion to the ideas of 'progress' in academic ways of thought and overturns the ^{notion}~~idea~~ that the most recent ideas derive from their predecessors - it would seem to be more true to say that they represent a reaction to prior theories. Such a view may seem superficial, and derogatory to the efforts of any science, but it need not be regarded as such - rather it proposes that the essential element of chance and human idiosyncrasy is re-emphasised, which results in a respect for the individual's view and vagaries, at the expense of an unnaturally stiff and abstract view of the nature of scientific 'truth'.^{**}

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This is particularly healthy in the social sciences, where the human being has tended to be overlooked in the search for a structure and group.

"In general, the attempt to develop a social anthropological approach - a process inevitably tied up with considerations of academic status - has often led to an emphasis on 'difference' rather than 'similarity'" (Goody commenting on Eisenstadt's article 1961)

The implication here and in Gluckman's remark that the consideration of academic status is something unnecessary and ridiculous seems to obtain inspiration from the 'de-bunking' (Burns) theories of sociology (and some social anthropologists) which point to causes of action hidden from the actors. In fact, the different approaches - in Gluckman's case of himself and younger anthropologists, in Goody's case of sociologists and social anthropologists - are genuinely different.

Gluckman writes in the same article:

"I believe firmly that anthropology is a science and therefore progressive and cumulative, in that speaking for myself, I feel that we pass the test that the fool of the younger generation outdoes the genius of the previous generation." (1968, p.238)

Yet he cannot accept that those who propose an alternative model of social change are doing much more than attempting to establish themselves at the expense of others. No doubt, if one was feeling uncharitable, he might be accused of fighting for survival in much the same way, with a rear guard action. He does not seem to be respecting the fools of the generation below himself anyway - rather impugning their academic motivation.

The point of this discussion is to dispose of the assumption that there is any justification in attempting to build upon old theories once a paradigm change has occurred, and to propose that the better alternative is to exploit to the full the new ideas and concepts which a paradigm shift brings about.

The paradigm shift which has taken place in anthropology is a result of, or at any rate is justified in terms of, the factors outlined before. But it has a wider base than this alone.

As Firth has said in a different context:

"The present day interest in dynamic theory for social anthropologists is partly a response to increasing perception of deficiencies in earlier theoretical approaches. But it is partly a response to changed conditions in our field of observation itself, and it has been influenced by modern intellectual movements of a more general kind. Of this we must take advantage." (1962, p.28)

Although I shall concentrate on the changed British social anthropological paradigm, I intend to mention other movements which I see as important in bringing about this shift. One of these is the move in linguistics to concentrate upon meaning as the most important element of analysis.

In anthropology the change has been from an interest in explanation through function, to one also based upon meaning - the meaning of a situation and its component parts to the individuals involved.

5. EMPIRICAL AREAS OF INTEREST

A breakdown of the areas in which studies using the concept of social network have been made by social anthropologists should illustrate what has already been said about the causes of interest in the notion, and support earlier statements on the influence of the network studies made in the 1950's and early 1960's on later work. The areas have been hinted at in the quotations used to provide evidence of interest in the third section of this chapter.

No systematic attempt seems to have been made to order by subject matter the network studies already made, even in Elizabeth Bott's overview of the field in her 1971 "Reconsiderations". The problems of such a classification are enormous.

It is, firstly, extremely difficult to distinguish between different applications of the network - for instance, metaphorical, analytical and empirical. I have included only anthropological work which is related to specific field material, so I have not considered theoretical exhortations to network analysts to embark upon studies of particular topics. The work I have included I have broken down into two types:-

- a) Empirical - in which actual relationships are described and networks constructed.
- b) Simile - in which the concept of network is used to conceptualise some field data, but no specific set of relationships is analysed in detail.

A second, even more problematic classification is allocating each study to a particular category of subject matter.

I have tried to divide the studies into twelve categories which appear to me to be the most pertinent, and I have attempted to include all the 54 studies which I am considering in this thesis. (Whitten's work "Personal networks and musical contexts in the Pacific Lowlands of Columbia and Ecuador" and the tests of Bott's hypothesis I have been unable to place in these broad categories). It is impossible in most cases to distinguish one part of a study as its major focus, and so many works appear more than once. Also an author may specify that he was working in a situation which he saw as, for instance, complex and unstructured, when another writer discussing a situation which is apparently similar, does not stress this. In such cases I have categorised the specifically mentioned area, but not that which is only a fortuitous aspect of the study as far as the analyst is concerned. There is, therefore, an arbitrary element in assigning a work to a particular category, but as this is inevitable when dealing with secondary sources, and since I have tried to point to the most problematic areas (which are relatively minor) I feel justified in presenting this analysis. I hope the table is of some help in clarifying what exactly has been ^{done} using the notion of social network in the past. The majority of the work is by British social anthropologists but I can see no reason, other than jingoism, to exclude other authors when their work has related to, and often influenced, the development of network analysis, particularly in Britain.

	Situation types	Process, generation of social forms	Reference groups, group control and appearance
Generation	complex, unclear Katz (1957) Wheeldon (1969) Boswell (1969) A. C. Mayer (1966)	Conflict, politics, manipulation A. C. Mayer (1966) Kapferer (1969) Wheeldon (1969) Harrises-Jones (1969) Hallpike (1970) Gulliver (1971) Whitten (1970)	Choice Philpott (1968) Kapferer (1969) Parkin (1969) P. Mayer (1961) Barnes (1954) Gutkind (1965) Bott (1957) Epstein (1961)
		Group/environment relationships Philpott (1968) Foster (1969) Pogge+Miller (1969) Turner (1967) Whitten (1970) Christman (1970) Nelkin (1970)	MacDonald (1964) Bott (1957) Cohn and Marriott (1958) P. Mayer (1961) Srinivas+Betelle (1964) Gutkind (1965) Stanford (1970) Abernathy (1970) Weisner (1970)
Non Groups	Lack of groups Gulliver (1971) Lamphere (1970) Yengoyan (1970)	Ethnicity Harrises-Jones (1969) Parkin (1969) Christman (1970) Hannerz (1970)	Social control + norms Philpott (1968) Wheeldon (1969) Epstein (1961-1969) Kapferer (1969) Bott (1957) P. Mayer (1961) Gutkind (1965) Parkin (1969) Lamphere (1969) Lamphere (1970) Provencher (1970)
		Class Epstein (1961)	Barnes (1954) Bott (1957) La Fontaine (1970) P. Mayer (1961) Jacobson (1970) Grillo (1970)
Change	Urban Epstein (1961) Pons (1969) Boswell (1969) Kapferer (1969) Wheeldon (1969) Harrises-Jones (1969) Parkin (1969)	Innovation and adaptation Katz (1967) Whitten (1970) Despres (1970)	Crisis Boswell (1969) Kapferer (1969) Lamphere (1970) Gulliver 9 (1971) A. C. Mayer (1966)
		Urbanization Oser (1969) Pogge+Miller (1969) Jacobson (1970) Stack (1970)	P. Mayer (1961) Frankenberd (1961) Baric (1967) La Fontaine (1969) A. D. Jones (1966) Beuchler (1970) Weisner (1970)

Empirical use of the network concept
Metaphorical use of the network concept

Fig.1 Application of network analysis

1. NETWORKS

"When one contemplates the language - total network, personal network, ego-centric network, set, action - set, reticulum quasi- group, field star, zone, personal community, ambience, social circle, faction, party, clique, grouping, group and corporate group - one feels oneself teetering on the brink of terminological, if not conceptual disaster" ... "In the present state of affairs I doubt if any sets of terms will be universally adopted, however clarifying and precise. 'Network' is suffering the fate of some other basic sociological concepts such as 'status' and 'role'. It is being used for so many purposes that it will take some time before we get a sense of what it is most useful for. In the meantime I suggest we put up with the muddle and keep the possibility of eventual clarification in mind." ... "There is of course some danger of 'network-ology' - getting lost in classificatory exercises for the fun of it, but so long as one is firmly rooted in empirical field studies one is unlikely to indulge in classificatory games." (Elizabeth Bott, 1971, pp.319, 321, 322.)

It is essential to establish more clearly what the concept of network has involved for different writers in different contexts. The clearest way to do this seems to be to comment in detail on particular definitions.

I have not presented all the definitions used in the works I have read, but I hope that I have picked out the most important ones. I have tried to choose definitions that are rather different in their implications so that I can illustrate the range of ideas associated with the method. At the same time, however, I have avoided giving definitions which are idiosyncratic that they unlikely to be taken up by other writers.

I have chosen to discuss the definitions chronologically as I think this makes clearer the development of the concept of network.

"The image I have is of a set of points, some of which are joined by lines. The points in the image are people or sometimes groups and the lines indicate which people interact with one another." (J.A. Barnes 1954, p.46)

Barnes was attempting to describe the emergence of a class system in Bremnes. He defines class as "a network of relations between apris of persons according each other approximately equal status" (p.45), Class and the network appear only in the unstructured field of relationships lying outside

their fishing and territorial fields.

For Barnes, in 1954, network is clearly not egocentric and includes only interaction which is informal. The use of the word 'interact' implies that he intends to include all relationships, however casual, in the unstructured field, but, in fact, this cannot be so. Some degree of positive affect must be involved. People interact in the most general sense of the word with their social inferiors and superiors and limit only more intense relationships to social equals.

Barnes tells how he rejected the term 'web' for this concept as he specifically wants the image to be three-dimensional. He points to ideas of Moreno, Armstrong and Chapple and Coon which are essentially similar to his notion of network.

"A network is a social configuration in which some but not all of the component external units maintain relationships with one another. The external units do not make up a larger social whole. They are not surrounded by a common boundary." (E. Bott, 1971, p.216)

"The idea of network is often met in anthropological, sociological and psychological literature, although it does not always bear this name e.g. River's concept of the 'kindred', (Rivers 1924), Fortes 'web' of kinship (Fortes 1949), Armstrong's 'grouping' (Armstrong 1928), see also Merton (1949), Moreno (1934), and Loomis and others (1953). Most of these authors are more concerned with the fact that a person has relationships with a number of people than with the pattern of relationships among these other people themselves. Radcliffe-Brown used the term metaphorically, as in his definition of social structure as 'a complex network of social relationships,' (Radcliffe-Brown, 1940.)

"In finding it convenient to use the term 'network' to describe a set of social relationships for which there is no common boundary, follow the recent image of John Barnes ... " (Bott, 1971, p.59)

Elizabeth Bott states that she is utilising Barnes's notion of network. For her particular purposes certain features of the concept become relevant.

The negative features of 'not making up a social whole' and not being 'surrounded by a common boundary' become important because she wants to emphasise the fact that none of the families in the study belongs within a circumscribed group of people. The network is seen here as ego-centric which provides a major contrast with Barnes's earlier formulation. This difference stems from the fact that Bott is talking in less abstract terms than Barnes - for her the networks have been described by the particular persons upon whom they are centred.

The nature of the links in the network is left vague still - 'relationships' is the word used. It is not entirely clear but it seems that these are only informal relationships of friendship and acquaintanceship. Bott, like Barnes, points to the use of similar concepts which have existed in anthropology for some time. (Even in 1971 she includes in a consideration of networks related concepts - such as social circles. The dynamics of social processes are of more central concern to her than precise terminologies).

Although Bott says she follows Barnes in her usage of the term 'network', I feel that two different traditions have derived inspiration from these two writers. It seems to be obligatory to acknowledge both Barnes and Bott in later network studies, which points to confusion between these two traditions (which will emerge later I hope) and a lack of close attention to what the two anthropologists actually said.

"By network ... I mean the interlocking of relationships whereby the interactions implicit in one determine those occurring in others." (p.16)

"We arrive at the structure of a society through abstracting from the concrete population and its behaviour the pattern or network (or 'system') of relationships obtaining between actors in their capacity of playing roles relative to one another" (p.12),

"Network and pattern are not meant as synonyms. Rather they are intended to indicate two different types or perhaps levels of overall structuring ... for which, frankly, I have not been able to find very satisfactory terms. The best way I can describe them is by saying that one type of structuring is abstracted from interactions, the other from distributions." (Nadel, 1957, pp.14-15)

Nadel's definitions have apparently received little attention from network analysts. He places a strong emphasis upon the determination of relationships by interactions occurring around them. The abstraction of relationships from role playing is also a central element. These two features are almost diametrically opposed to the ideas upon which network analyses using exchange and so on are based, in which the manipulation of the network by the individuals concerned is central. Similarly networks have been seen as a first stage of abstraction rather than a final one. It is difficult to see what would be left in a network of relationships abstracted from role playing.

"Chanda .. is in touch with a number of people, some of whom may be in touch with each other, and some of whom may not" (p.109).

"A network is made up of pairs of persons who interact with one another in terms of social categories and who regard each other therefore as approximately social equals, ignoring in this context the slight differences in social status there may be between them. The network as a whole, therefore, provides a covert or informal structure, composed of interpersonal links which spread out and ramify in all directions, criss-crossing not only the local community but linking together people in different towns and town and country." (Epstein, 1961, p. 110.)

Epstein follows Barnes (1954) closely particularly since their areas of interest overlap. However, he seems to have united Barnes's definitions of network and social class by restricting the network to pairs of persons who interact regarding each other as approximate social equals. He also limits the network to informal ties of friendship and so forth. The notion of 'interpersonal link' is again left vague.

For Epstein the network provides a way of ordering an apparently confused urban situation, and of uniting geographic areas in terms of social linkages.



This he does by analysing the social life of a particular individual.

"The network is the total of ego's interpersonal relations with other individuals. In any particular the individuals concerned do not constitute a group in the sociological sense they form something which like a kindred - can only be defined with ego as the central point of reference" (P. Mayer, 1961, p.9),

Mayer bases his concept on that of Bott. He is concerned with the notion's negative aspects - the network is not a group. The totality of ego's relationships is important as this implies a move away from the purely informal nature of previous network relationships. Relations are still not defined however. He explicitly sees the concept as ego-centric, a notion which he shares with Bott and Epstein.

"... mapping out the concrete relations between individuals in their diverse roles."

"A group is a bounded unit. A network on the other hand, ramifies in each direction, and for all practical purposes stretches out indefinitely ... It has a dynamic character. New relations are forged and old ones discarded or modified." (Srinivas and Beteille 1964, p.166.)

Srinivas and Beteille imply that network is a method. They insist also upon the concept's dynamic nature. foreshadowing its involvement with social change.

"A network in effect is the total of ego's interpersonal relations. It is a quasi-structure, depending on Ego, and related almost automatically to a role model made up of Ego and his contemporary interactors. Where these roles can all or mostly be ascribed to

specific and definable statuses a structure, or a semblance of a structure may be built. When this is not possible as in highly fluid situations a role model, pointed by a network metaphor is all that is left." (Reader, 1964, p.28)

Reader sees networks as ego-centric, and including all of an ego's relationships. For him a network exists when a role structure is ill-defined. The network is viewed as a social structure with some elements - orderly statuses and so on - missing, it is a negative concept again.

"Institutional networks ... are characteristic of two types of small scale African urban neighbourhoods. Firstly, there are those based on ethnicity ... Secondly, there are those which in which ethnicity is less important. The institutional network is based on economic (occupational) and social (class) categories ... institutional networks are also defined in terms of a clearly identifiable structure, such as formal social position.

"Situational networks are characteristic of secondary relations which are generally of short duration and designed to meet non-traditional and specific urban needs. Such networks are defined in terms of action rather than formal structure of change rather than ascribed social positions." (Gutkind, 1965, p.124)

Gutkind attempts to separate more and less transient networks. His definition of institutional networks seems to owe its emphasis upon class to Barnes and Bott. The definition of situational networks seems to be more useful but the limitation of needs to those which are non-traditional and specific urban makes this concept rather obscure.

It is interesting that Gutkind very clearly sees all relationships as part of the networks. His emphasis upon change within the situational network is also relevant to future developments of the concept. He seems to be groping towards the later formulation of the action set, as opposed to the social network, which A.C. Mayer produced a year later, independently of Gutkind's work.

"The network of personal links which individuals build around themselves ..."(J.C. Mitchell, 1966, p.54)

This early definition of Mitchell's implies that only informal links are a part of the network. The biographical nature of the network is stressed.

"... there has been an attempt by social anthropologists to put forward two concepts for dealing with social situations in which collections of people are found that do not form groups. One is the 'unbounded' network of relationships between pairs of people making up a field of activity. The other is the finite set of linkages initiated by an ego, which forms part of a social network." (A.C. Mayer, 1966, p.102)

Mayer is concerned to make the contrast between the unbounded network and the finite, ego-centred, part of a network involved in a particular event which he defines as an action set.

"that group of persons who maintain an outgoing significance in each others lives by fulfilling specific human needs."(Speck,1967, p.209)

Speck is a psychotherapist. I include his definition of network since it illustrates clearly the way in which concepts must be related to problems. He is concerned only with people in close relationships to one another, who exert an influence upon ego's personality and ultimately his sanity. For each ego this is a well-defined set of people and Speck uses the term group. He is thus contradicting the usage of almost all the anthropologists who specifically contrast and oppose network and group.

"By social or personal network I mean the chain of persons with whom a given person, ego, is an actual contact or with whom he can enter into contact. The personal network is distinct although it may touch and very often overlap those of others. That is, they have several members or linkage chains in common. In some respects all of social life can be seen as a network. This network is the social matrix from which groups and other social forms crystallise or are constructed. It has definite structural characteristics." (Boissevain, 1968, p.546)

Boissevain's definition introduces a further vagueness about the limits of the network; he includes the contacts of contacts. This may be because he developed his ideas in a context of patronage in Malta in which chains of contacts were used to obtain particular favours.

The egocentred personal network "may touch" those of others. This implies that linkages are actually defined rather precisely since otherwise it is obvious that all personal networks overlap to an enormous extent with those of other egos.

The inclusion of all social life in the network and its conceptualisation as a matrix from which other social forms emerge, broadens the scope of the network enormously. Ideas of generation of social forms are introduced.

"The personal network as used in this symposium exists situationally, in the sense that the observer perceives only those links which are activated and being used by the actor at any one moment and which the observer considers are significant for the problem we are interested in." (J.C. Mitchell, 1969, p.20)

Mitchell says that the studies published in the 1960s, "Social networks in Urban situations", show a considerable advance "... on empirical data on

social networks at present available and for this reason alone, irrespective of the intrinsic interest of the analyses themselves, are worth publishing" (1969, pvi). We are invited to accept the article's interest as deriving from their use of the network concept.

Mitchell's own definition stressed the situational - short term, unstructured everyday aspects of the personal network, which is taken as ego-centred. The discrimination of the observer decides which links are to be seen as important at any one moment. From this stems a vast confusion over the precise position of the observer. Is he to remain somehow totally outside the network he observes? If so how can he in any meaningful way decide which links are important? He must rely on his understandings of the situation which rest on his own commonsense and be ultimately derived from his knowledge of people and social life. If he uses informants he may attempt to present their understanding of the situation and relate it to their social position. It is essential that he explains how he decides which rules are important, and to that extent at least he must abandon his "low profile" and enter into his own data.

Reticulum - "that part of a total network which is defined ego-centrally" - "the direct links radiating from a particular Ego to other individuals in a situation, and the links which connect those individuals who are directly tied to Ego to one another." (Kapferer, 1969, p.182)

Kapferer introduces the term "reticulum" for ego-centred abstracts from the network. His presentation is particularly formalistic and he provides more quantitative data than any other analyst so far mentioned here. He recognises that networks provide only a method and allies the method with exchange theory.

" All the human resources an individual can muster i.e. his social network;" (Boswell, 1969, p.285)

Boswell's definition relates particularly to the problem in hand - that of mobilising support in a social crisis through the manipulation of the social network.

"Each individual in a society has social relationships with a large number of friends and acquaintances. All these relationships together constitute what has been called a personal network." (Wheeldon, 1969, p.132)

Wheeldon limits the network to ties of friendship and acquaintance. This gives the concept a particularly ~~Western bias~~, since it is so positively valued. In this way, the definition is ethnocentric. Again such a formulation relates to Wheeldon's problem - the operation of networks within voluntary associations.

John Barnes has written an article which appears in the same symposium (though it was written in 1966) which is entirely a theoretical statement on the network concept.

He isolates the total network which consists of people and the relationships between them. The people impinge or not upon one another/^{and}this notion is deliberately left vague at first. The total network is a first order abstraction from reality and contains as much information as possible, It is a "model that we seek to make as close to reality as possible, rather than to idea's in someone's mind" (p.56), The role of the observer is assumed to be that of a camera. Although it is apparent that Barnes is anxious to describe events in an objective way by refusing to consider the observer's position he removes any possibility of objectivity from the study.

Since this is true of the relatively straightforward total network, which contains everything possible, it is even more true of later abstractions such as the partial network based upon "some criterion applicable throughout the network" (p.57).

Barnes also names the star and zone, and delimits first, second etc. orders. (A star is the set of relationships radiating from or converging on Alpha, a zone contains also the relationships between Alpha's contacts pp.58-60).

Barnes discusses the concepts of boundedness and finiteness.

"If there is a boundary there are some persons known to exist who are not in the network or who can be reached only by a very circuitous route".

This implies that to be a part of a network a person must do more than impinge on, or know about, other people in the network. Although Barnes says that his article is concerned with how to limit such notion he nowhere approaches this difficult problem. Further he implies that some sort of standard measure could be found and applied to all networks. The implications of a standardised methodology applied by an observer who does not impinge, himself, upon the network are immense.

"On the one hand networks are understood as egocentric structures which defined with regard to a single individual. Hence the name personal network. These networks are, as it were, personal creations of an ego and dissolve when ego dies. On the other hand, networks are conceived as ramifying chains of dyadic relationships involving specific fields of activities ... the assumption underlying these approaches is that individuals can be separated from the structures which they form with other people. Though this perception is underwritten by ordinary language, it hardly corresponds with what one actually observes, what we call 'individual' and 'society' all aspects of men that belong together." (Blok, 1972)

Blok has pointed clearly to the two traditions which I mentioned as deriving from the work of Barnes and Bott respectively. That derived from the former involves the abstraction in some way of networks of relationships from the social situation. As Blok points out this has no validation in reality.

Ultimately such an approach leads to the return to a rigid formalistic concept. Similarly such a definition of network is not concerned with dynamic social processes any more than the notions it is said to have superceded - such as group and social structure.

The other tradition relates analysis to particular individuals involved in a social situation. From this approach course the concepts of action-set, quasi-group and so on such an approach requires the clear presentation of the sources of data which includes the actor's understandings of the situation.

It is not true to say that an overt split has appeared between network analysts using abstract sociocentric concepts and those using egocentred notions. However, there is a growing divide between those who feel the method will benefit from further refinement of concepts, and who seems to be looking for a widely applicable method of quantifying data on interaction, and those who find the terminologies useful in a more vague way. **

The removal of the observer from the action (on which he must be impinging) seems to be an essential part of the refining, quantifying school of thought. As a result it is profoundly unsatisfactory and belongs in the old structural/functional paradigm, rather than in the new orientation of anthropology.

The potential of network analysis lies in development in quite a different direction, as I hope I shall argue convincingly by demonstrating that a new paradigm exists and that networks can fulfill the requirements of such a paradigm.

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For instance Elizabeth Bott, who says her own solution to problems of terminology is to use network in the sense of total network, star and zone, but to use adjectives to distinguish them where necessary (p. 321, 1971),

Network Analysis

Network analysis as it is used in this thesis involves using the idea of network to analyse anthropological data. In some cases information is presented in terms of networks; in others the concept is used metaphorically to describe social processes.

Clearly the exact definition of network varies as it is related to specific problems. Depending on the topic under scrutiny different aspects of the concept become relevant.

At the empirical level precise definition of the type of relationship to be included in the network is required and this again must relate closely to the problems at hand. Analysis of different topics^s and different types of relationship become important.

In order to preserve the flexibility of the concept it is necessary to keep the general definition of the concept as broad as possible, and refine it as required to analyse particular situations.

The broad network concept is - a set of people and their interrelationships.

III THE BROADER IMPLICATIONS OF NETWORK ANALYSIS

1. The Role of Domain Assumptions

"All groups have a body of beliefs which are taken for granted merely because no-one disputes them, and which often turn out to be illusions. Assent is induced by conforming influences not totally different from those operating in religion or politics." (Cooley, 1962, Manis and Meltzer Eds. p.70.)

Amongst some anthropologists, one belief seems to be that theorising is a 'bad' thing and can be escaped by collecting empirical data. For instance, Pelto recognizes that there are various types of theory involved in any anthropological work:

meta-theory

personal theory, and

explicit anthropological theory.

He even writes,

"a theoretical description is not logically possible - that all research is structured in terms of some sort of theoretical constructs, however implicit and unrecognised by the researcher. In spite of the ubiquitous presence of theory, anthropologists (and other researchers) vary a great deal in the extent to which they organize research in terms of explicit theoretical systems." (1971, p.17)

And yet, his answer to the problem is not to attempt to elucidate as far as possible the different theoretical systems which bear on a particular piece of work, but rather to circumvent the problem at all costs.

"My position is that, regardless of which special theory or theories serve as the frame of reference for particular instances of research the main pathway to eliminating anthropological 'credibility gaps' is to concentrate methodological attention at the relatively low - abstraction end of the research paradigm. That is the most pressing problems in improving anthropological research design lie in the structure of primary data gathering - in the actual field research operations. Once the procedures and concepts of primary anthropological description have been systematized, rigorous controlled comparisons can be developed and theory building can then proceed on much firmer foundations." (1971, pp. 19 and 20)

Such a proposition rests firmly in the mainstream of deductive science. It is also apparent that networks have been noted as one of the means of attempting 'systematized rigorous controlled comparisons' by many of their practitioners, notably those of the Manchester School.

Pelto presents a diagram representing his view of relationships between facts and theory:

General Theory and Models
 Middle range Theory
 Low Order propositions
 Modes of Observation
 Real world of events and things

It is one which is shared to some degree by many anthropologists.

Nadel also takes theory to be deductive ~~inform~~:

"they [the interconnected propositions or generalisations of a theory] are such that the empirical facts within the range covered by the theory are deductable from it, so that their being what they are is predicted (by the theory) and understood (in the light of the theory)." (1957, p.1)

Nadel's next sentence is of interest:

"But 'theory' can also be understood in another, less ambitious sense, namely as a body of propositions (still interconnected) which serve to map-out the problem area and thus prepare the ground for its empirical investigation by appropriate methods."

This points to a crucial omission from Pelto's diagram which invalidates his conclusions on the correct way to overcome the problems posed by his diagram.

The relationship between the elements of his diagram is not linear but circular. Theory modifies and determines our experience of the world - it 'maps out' and selects areas of relevance in social life.

General theory	middle range theory
Real world of events and things	low order proposition
modes of observation	

Our theories of what man is like, how we expect our fellow human beings to behave, alter our perception of the 'real world of events and things', and are, in their turn derived from our experience of the 'real world of events and things'.

Every individual, whatever his social position, possesses a world view, which is, ultimately, unique to himself, but large parts of such a world view are shared, 'objective' knowledge.

"We attain a point of vantage from where we find out that we are conferring meaning upon the world instead of letting the world shove its meanings down over us. We become active in forming 'ontic' decisions, that is to say decisions about the being of things ... we do in fact more or less 'process' what we see at the retinal level. What is finally sent along to the brain as information has been heavily processed at the retina, and a sort of temporary hypothesis about what the eye is seeing is transmitted rather than any direct information about what there is 'out there'. Neither A nor B sees 'the reality', but both have their 'vision' of the reality, both thus confer 'ontic' meanings and significances upon what is experienced, and thus the world of total subjective relativity is created." (R. Poole, 1972, p73.)

It is this processing which many anthropologists ignore. Their mistake leads to a hollowness in many anthropological works. However, other more perceptive anthropologists have recognised the inevitable suffusion to some degree of the anthropologists world view into his work.

Beattie has written:

"although the distinction between descriptive and analytical studies is indispensable, it can be misleading, especially in social science. It is not one between studies which imply abstraction and studies which do not. It is rather one between levels and kinds of abstraction, for even the most matter-of-fact descriptions are shot through with abstractions, usually unanalysed 'common sense'". (Beattie, 1968, Manners & Kaplan, p.118)

The question arises, however, of what exactly the filter which acts before information travels from the retina to the brain, consists. In T. Kuhn's terminology the filter is a paradigm. He remarks:

"something like a paradigm is a prerequisite to perception itself." (p. 112) "If that body of belief (a paradigm) is not already implicit in the correction of facts - in which case more than 'mere facts' are at hand - it must be externally supplied, perhaps by a current metaphysic, by another science, or by personal and historic accident" p.17, 1962.

Durkheim (Rules of Sociological Method, 1938, p. 25) remarks that theory must be present at the outset of any sociological investigation or the facts presented would be completely random.

Gouldner has segregated explicitly formulated assumptions - 'postulations' - from background assumptions which are unpostulated and unlabelled. The latter operate alongside a theory as silent partners, and govern domains of different scope.

"Domain assumptions are the background assumptions applied only to one domain; they are, in effect, the metaphysics of a domain!" (1970, p.29)

Thus, crucial domain assumptions in sociology and social anthropology concern the nature of man as I suggested earlier. They are also explicitly metaphysical or philosophical, as Gouldner says. Domain assumptions are of great importance since:

"... in some part, theories are accepted or rejected because of the background assumptions embedded in them. In particular, a social theory is more likely to be accepted by those who share the theory's background assumptions and find them agreeable." (Gouldner, 1970, p.29.)

The context of justification thus depends a great deal upon shared background assumptions.

"What is accepted as true is accepted as true because of an already existing structure of belief in the individual, an existing structure of interest and fear. It is to a person who already exists, complete in his hopes and fears, complete in his perspectival history, that one addresses one's arguments. He possesses already a vision of the world, a vision peculiarly his, which he has built up over years with care and concern. What he does not want to understand, he will not accord the status of an argument. What runs against his own interest, is not a 'fact'. What is antipathetic to his own view, is not

'objective'. What he disapproves of is 'immoral'. What he does, is right. What he stands for is not to be questioned." (Poole, 1972, p.121)

Michel Foucault has written of the 'positive unconscious' of knowledge - " a level that eludes the consciousness of the scientist and yet is part of scientific discourse which he (Foucault) seeks to reveal rather than dispute its (knowledge) validity and seeking to diminish its scientific nature" (1970, p.xi) .

He places the positive unconscious at a deeper level than the paradigm or domain assumptions, since he explicitly denies that elucidation is possible by those immersed in the discipline at the time.

"What was common to the natural history, the economics, and the grammar of the classical period was certainly not present to the consciousness of the scientist; or that part of it that was conscious was superficial, limited and almost fanciful; but, unknown to themselves, the naturalists, economists and grammarians employed the same rules to define the objects proper to their own study, to form their concepts, to build their theories. It is these rules of formulation, which were never formulated in their own right, but are to be found only in widely differing theories, concepts, and objects of study, that I have tried to reveal ..." (Foucault, 1970, p.ix)

I would accept that there probably exists a level of the positive unconscious of knowledge which it is impossible to penetrate at present in our own search for knowledge. At the level of paradigm and domain assumptions it seems clear that we can attempt to explore our assumptions.

Nigel Harris has described the existence of implicit systems of ordering data - the filter of Poole's description:

"What I mean by 'higher - order system' are those complicated schemata which make possible experience at all, which organise the raw, unidentified perceived data in forms comprehensible within lower order systems ... what we know of the higher order

systems comes to us in the form of logical postulates, of axioms, of apparently arbitrary rules, without which we can undertake no examination of the world at all." (1968 ** pp.32 and 33)

	<u>Rarely Available</u>	<u>Readily Available Concepts</u>
Harris	Higher Order	Lower order systems
Gouldner	Domain assumptions	Postulates
Foucault	Positive Unconscious	Episteme
Kuhn	Paradigm	

The terms of Gouldner and Kuhn are the ones which I find most useful, although I may refer to the others as well.

As we have seen, Pelto and others of his ilk/ would attempt to evade domain assumptions by concentrating on an empirical level in which it is hoped, theorising can be avoided. The collection of 'pure' data is their aim. Such an aim is both unattainable, and produces grave distortions. A better aim is to try to explain and be aware of the postulates and assumptions which always operate.

"Scientific work, analytically speaking, goes on at 3 not 2 distinguishable levels; besides empirical work and logico-deductive theory, we have the equally important, the all too implicit, frameworks models or philosophies that inform our approach to both of the former." (Buckley, 1967, p viii)

What I intend to do is to try to pick out the postulates made by network analysts, and also approach the domain assumptions which it seems

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It is interesting that Harris reverses the usual way of looking at such embedded concepts - higher order would make most persons think of the more consciously imposed orders. Clearly Harris is thinking in terms of levels of abstractness.

to me are inherent in using such a methodology.

Gellner has concluded, at the end of his book "Words and things" that explicitness is essential.

"Whatever may be the limits of meaningful discourse, the first principle of semantics must be: 'Whatever can be insinuated can be said'. Ineffabilities, and far worse, the camouflaging of presuppositions and values as procedural rules, will not do."

"That which one would insinuate, thereof one must speak". (1968, p.296)

I shall try to speak for network analysts by making explicit what I see as the theoretical and sub-theoretical levels of their approach. In doing so I shall be putting the case for network analysis as it has already been used in anthropology. Later I shall examine the validity of these domain assumptions (I do not want to argue that the assumptions I present underly all network analyses. I am trying to locate broad themes).

Ardener seems to feel that network analysts are aware of the structuring of a field before analysis occurs.

"I have already suggested (1971 a) lxxv) that Barth's transactions and Barnes, Botts and Mitchell's networks, and such developments, can thus be designated as steps towards the highest stage of functionalism: That is: a functionalism become aware (or about to become aware) that the field of behaviour or action, even when arbitrarily isolated from the ideological programme that determines its meaning, must itself be structured by the observer before it can be 'observed'." (1971 (b))

It is interesting that he places networks firmly within a functionalist framework. I would also question whether all network analysts are aware of the complexities of the operation of domain assumptions. I shall examine this now.

2. The Presentation of Raw Data

Some network analysts are concerned to present a description which resembles 'reality' as closely as possible.

J.A. Barnes has written that the total network "is a model which explains what actually happens, not what people think happens, or might happen". (1969, p.56)

He derives this idea from Radcliffe-Brown whose definition of social structure as being "a network of actually existing relations" (1952 p.190) he quotes. In the same paragraph he writes - "strictly speaking, no social relationship 'actually exists' in the same sense that you and I and other real people exist. But these social relationships are 'actually existing' in the sense that they form part of a model that we seek to make as close as possible to empirical reality in all relevant particulars, rather than to some ideas in someone's mind" (1969, p.56). Barnes here indulges in the fantasy that there can exist thought and ideas without a thinker.

Another pioneer in the network methodology is Mitchell. He seems to have the same view that it is possible to present through networks a view of reality untouched by human mind, as it were. He remarks about theory that "the closer the fit of theory to reality the better it is" in his introduction to Van Velsen's book "The Politics of Kinship" (1964).

Mitchell has also written on the relationship which exists between network and institutional analysis.

"It should be clear that this does not mean that the analysis of social relationships in terms of social networks is a substitute for an analysis in terms of social institutions. The two types of analysis start with the same basic empirical data but proceed to make abstractions in different ways. The sequence of abstractions after the initial act of observation, is from actual behaviour to multiplex linkages in networks, from multiplex relationships to what Barnes calls 'partial networks', ... to the institutional structures". (1969, p.49)

One observes in an unstructured way, and later imposes whatever level of order is suitable for a particular problem.

Barnes and Mitchell are dominant figures in network analysis, and their opinions must be regarded as being of corresponding importance. However, other writers have exporised the method in order to escape observer bias.

Epstein has remarked that:

"The detailed evidence of the narrative which follows, puts the reader in a position to check my own analysis and, where this is inadequate, to suggest alternatives and more satisfactory interpretation of the material." (1969, p.80)

Boissevain also implies that the reader is able to analyse the data he presents for himself, as if it were unstructured by Boissevain's domain assumptions and processes of perception:

"Before examining the networks in detail, the reader might like to apply what he knows of network structure to the background of Tony and Cikku to see if he can formulate hypotheses regarding the structures of the two networks, their similarities and differences. He can then compare his hypotheses with the conclusions and analysis set out in the rest of this paper". (1972, p.12)

Srinivas and Beteille have also located objectivity within network analysis.

"Therefore, once we shift from the individual actor and his network of concrete interpersonal relations to the productive system and its corresponding network we move from the 'subjective' network of the actor to the 'objective' one of the observer."
(1964, p.167)

Aronson claims that network analysis:

"is clearly 'grounded' in ponderable observation of real behaviour and at least begins by assuming very little about the nature of that behaviour." (1970, p.223)

Similarly Gulliver says that:

"in the end my own emphasis is on what men did as far as this could be recorded, for however faulty my own understanding, I seek to give the evidence on which an understanding may be based. I have de-emphasised the search for ideal rules and modes, just as I have eschewed apt illustrations, suppositional cases, and generalised examples." (1971, p80) "By concentrating on these events it is proposed to get away from over-vague, generalisation coloured by ideas and formal conceptualization." (1971, p.131)

Gulliver aims at accurate 'reporting' of Ndendeuli social life.

It is surprising how few people who use networks stop to discuss exactly how they are embarking on the task. Amongst those who do, the implication would seem to be that networks provide a way of presenting raw, unprocessed data.

This idea is particularly prevalent among analysis^ts of the Manchester school who are the dominant group of network analysts in British anthropology and thus of considerable importance to this discussion. The

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It is difficult to imagine what Gulliver is presenting. He cannot hope to present everything he observed in his fieldwork, and presumably he is not choosing inappropriate material, or Durkheim's random facts.

idea permeates even to workers using related concepts other than networks.

Van Velsen:

"By this method [situational analysis] the ethnographer not only presents the reader with abstractions and inferences from his field material, but he also provides some of the material itself. This should put the reader in a better position to evaluate the ethnographer's analysis not only on the basis of the internal inconsistency of the argument but also by comparing the ethnographic data and the inferences drawn from them ... I would suggest that in a situational analysis, incorporating co-ordinated case material, the reader is in a better position to examine for himself the basis and validity for the other's selection. Moreover if the reader does not agree with the ethnographer's selection or interpretation of the material, he will be better equipped to attempt a different interpretation or to test different hypotheses because he will have more material to work on. Thus an author using situational analysis is more exposed - he has to put more cards on the table." (1964, p.xxvi)

Some anthropologists who use the concept are concerned with problems of the observer's domain assumptions, but I feel that the notion of presenting pure data must be considered a dominant motif of network analysis.

One of their most important domain assumptions is that it is possible to escape from the effects of such assumptions, by working at a low level of abstraction and using a clearly defined method - network analysis.

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Co-ordinated by whom, and for what purpose? - by the author to illustrate his argument.

3. Network Analysis as a scientific method

The social sciences have long tried to emulate the 'hard' sciences of physics, chemistry and so on. Within British social anthropology when Malinowski began his search for a theory of a 'purely empirical nature' in 1926 the movement was underway. Radcliffe-Brown was the major exponent of the scientific nature of the discipline. I have quoted his definition of anthropology elsewhere but another illustration of his emphasis is worthwhile. In Chicago in 1937 he was arguing for the British study of social structure, as opposed to the American concentration upon culture.

"You cannot have a science of culture. You can only study culture as characteristic of a social system, therefore, if you are going to have a science it must be a science of a social system."

In America, Kroeber and Hoebel also promulgated a view of anthropology, as a science.

The concept of science is still equated for many with methodological rigour as Peltó specifies. He defines sciences as:

"the structure and the processes of accumulation of systematic and reliable knowledge about any relatively enduring aspect of the universe, carried out by means of empirical observations, and the development of concepts and propositions for interrelating and explaining such observations." (1971, p.29)

As Jarvie observes, scientific method becomes the object of a cult among social scientists - "a cargo cult". Network analysis must be seen in the light of this desire to emulate the hard sciences.

I have already pointed out that Barnes directly relates his concept of network to Radcliffe-Brown's formulation of social structure. Barnes'

present position is of interest.

"The notion of sociology^{**} as a social science with its own hard concepts clearly defined transculturally and with its own corpus of tested and interrelated propositions along the lines of the natural science paradigm, is of course, the hallmark of Comte and the positivist tradition whose claims so offended Sidgwick. During the last ten years or so many younger sociologists have rejected the apparently unproductive search for universally valid generalisations, for social laws analogous to the laws of gravity and thermodynamics in the natural sciences. Indeed positivism has become a derogatory term in a way that would have met with Sidgwick's approval. But whereas Sidgwick merely protested against the over-ambitious pretensions of nineteenth-century sociologists and looked forward to the day when their claims to have discovered the laws of social development might be validated, many present day critics of positivism reject this scientific quest entirely, and seek to promote a sociology that is particularist rather than generalizing, that emphasizes the emic categories of the actor, rather than the etic categories of the outside observer, and that stresses the social function of criticism rather than the scientific function of explanation.

"It seems to me important that we should not abandon the search for a fuller understanding of the nature of order and disorder in social life merely because the natural science paradigm used by the early positivists and by most later mainline sociologists has proved inadequate and largely unrewarding. Without some attempt to adapt the rigorous methods of scientific testing and validation to the more difficult field of social life, we have to fall back on traditional wisdom, common sense and rules of thumb, on social technology as it were rather than social science."
(Barnes, 1971, pp.18-19)

It seems that Barnes, whilst recognising the obvious failure of the natural science paradigm when applied to social science is still, like Pelto, determined that the rigorous methodology of the hard sciences is essential to sociology. His recent (1969, 1970) developments of the network methodology also give credence to this view. He is seeking a method so well formulated that it can be applied to any problem by anyone and yield the same results - a method to rival the experiment of the hard sciences.

"I certainly think that they [scientific methods] cannot be taken over without very careful scrutiny ... I feel that we have to learn to apply the methods of the natural sciences to what I regard as the much more difficult problems of social enquiry. We are dealing with actors who think, feel and believe and whose actions are determined by their motives and their purposes and these purposes

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Since he specifies (See Chapter 1) that he can see no grounds for separating social anthropology and sociology, these remarks are equally relevant for both studies.

and beliefs are part of the data which we have to take into account. In that sense we are dealing with subjective data. But that does not mean that we cannot deal in a scientific and valid way with data which in their origin are subjective." (Barnes, 1971.)

The approaches of Mitchell and the others of the Manchester school, seem to reflect the same search for a universally applicable method. The idea that anthropology is and must be scientific has been forcefully put for them by Gluckman.

"I believe firmly that anthropology is a science." (1968(b), p.225) and "The status of sociology largely depends upon how far it can claim to be scientific in its procedure and the results it obtains." (1944, p.26.)

The desirability of scientific status and methods for anthropology is accepted, and it is a domain assumption, shared by many network analysts and other anthropologists.

For instance, "Comparison is a methodological equivalent of experiment" (Barth, 1966, p.2) (my emphasis), Gulliver says his book is presented as "an experiment or series of experiments in sociological analysis where the material happens to come from the social life of a people in any earlier period" (p.v, 1971) (my emphasis). Despres describes anthropology as a science - the comparative study of culture.

Network analysis fits particularly well into such a view of anthropology since it appears to be the hoped for standard methodology which can be applied to almost any problem. The question arises as to why exactly the paradigm of the natural sciences has been so attractive for so many anthropologists. Gluckman provides a hint when he says the 'status' of sociology depends on its preference to be scientific.

"Poets and historians and theologians and philosophers are sometimes scorned for 'being so anthropomorphic about men.' But this charge of being merely anthropomorphic about men, of treating men as human beings, is one that is also sometimes made against the social, behavioural, human scientists themselves, because in science, as among birds, there is a pecking order. And the physicist looks down on the biologists, on the physiologist perhaps, and he in turn looks down further on the experimental psychologist. If the experimental psychologist wants to peck somebody, he has to go down to the sociologist or perhaps the social anthropologist, and they in turn have to be content with despising belletristic literature." (Remford Bembrough, 1971).

The reasons for the existence of this particular pecking order, and anthropologists consequent desire to emulate hard science, is to be found in the apparent success of the natural sciences. **

"The practical success of spatial science in enabling us to predict, and even to control, the behaviour of the material world about us, has given it vast prestige and brought about a feeling that the more all our mental processes are like it, the more perfect they will become." (Cooley, in Manis & Meltzer, 1962, ed., p.70)

4. Quantification and Mathematization

Mitchell gives us his second reason for the recent popularity of network analysis "the development of non-quantitative ways of vigorously stating the implications entailed in a set of relationships among a number of persons" (1969, p.1),

Anthropology has long been regarded as a field in which statistics were only able to contribute to a small extent. Nadel has said that anthropologists are biographers of single societies and that their use of intensive studies of small-scale societies precludes the use of statistics.

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I would like to emphasise the 'apparent success' here since I do not agree that either this, the proposed hierarchy of disciplines, or the ideas imputed to, are valid. However, these ideas do seem to have influenced many network analysts.

In contrast, sociology has developed statistical analysis in many ways. A rapprochement between the two disciplines is implied again in that their methods are increasingly coming to overlap. (Manners and Kaplan, 1972).

It is clear that for Mitchell and other analysts, networks present a means of introducing mathematical concepts into anthropological studies. The presumed advantages of statistical analysis are several - the availability of readily comparative data, and the possibility of extrapolating rates of change, being two of them. Statistics are seen as overcoming the problems presented by vague generalizations - such as divorce is frequent/infrequent.

Colson specifically relates interest in statistics to the present state of anthropology and its claims to be scientific.

"The present interest in the comparative method undoubtedly reflects the fact that anthropology has reached a new stage in its struggle to become a "science". With the use of comparative method comes the application of statistical techniques." (1967, p.1.)

Colson also quotes Driver who makes the same point that:

"We must obtain more quantification of every kind wherever it is possible to do so ... if one of the goals of ethnology is to arrive at patterns, configurations, or structures of cultures, these must be determined inductively from adequate numbers of actual facts if they are to satisfy the standards of science." (Driver, 1953, p53)

The desire to use mathematical concepts is a common one within anthropology and one which has been of importance for at least thirty years.

Networks are presented as being one means of standardising the collection and presentation of data on behaviour, thereby making it amenable to manipulation by mathematical processes. This is the justification for the presentation of abstract treatises such as those of Mitchell,

Wolfe and Barnes, which suggest detailed methodologies to be followed by other workers:

"The conceptual scheme and the procedures we have illustrated here demonstrate, we believe, that the need for standardised methods of recording networks can be met ... we ought not to cower before the realisation of the vastness of the social network; that part of it which affects a given decision is less than infinite; and electronic devices and mathematical models permit us to manipulate much more data than we were previously capable of dealing with."

(Wolfe, 1970, pp.236-237)

It is hoped by these writers that once a standard method has been adopted the network concept will reach its full potential.

"This [failure to develop a standard method of network analysis] is partly because the study of personal networks requires meticulous and systematic detailed recording of data on social interaction for a fairly large group of people, a feat which few writers can accomplish successfully. Certainly the earliest writers who made use of the notion have not provided enough systematically recorded detail in their accounts to make it possible to check their interpretations." (Mitchell, 1969, p.11.)

A refined network methodology is suggested as a means of providing such systematic data which is then available for mathematical analysis. In this way the 'rather highly idiosyncratic ex poste facto interpretation of data originally collected for other purposes' which as Wolfe remarks (1970, p.229) has characterised previous network analyses will be avoided.

As well as suggesting methods of gathering data, Wolfe and Garbett have suggested means to record the information. Sociometric methods, and graph theory have also given impetus to the attempts to use mathematical techniques in network analysis. The studies by Harary, Norman and Cartwright, Coleman and Cartwright and Zander are referred to particularly in this context. (I have read these texts but cannot see how their methods would be meaningfully applied. As yet they have not been). Gulliver (1971, p.349) suggests that network analysis may only reach its full potential when allied with sociometric methods.

However, the limitations of quantification are also pointed to by several of the analysts.

"Quantification, however, while it is an important method of data correction, should be an aid to, and not the purpose of field work. Just what should be counted and how far the counting should be taken should be dictated by the sort of theoretical propositions the anthropologist is trying to establish. Theory should determine his use of statistics: his statistics should not delimit his theory." ... "Quantification has no magical property to confer accuracy on the data; if the basic observations are inaccurate or incomplete, statistics derived from them will assuredly also reflect those weaknesses. What quantification achieves is a condensation of facts so that the regularities and patterns in them are more readily discernible. It follows that the quantification must be made in terms of categories of classification that are meaningful for the purpose the observer has in mind." (Mitchell, 1967, pp.21 and 26.)

Specifically writing on quantifying network analyses, A.C. Mayer remarks that:

"Quantification must adequately express the total configuration, rather than merely categorise the properties of single links and paths, if this can be done, action sets and consequently quasi-groups can be more easily compared." (1966, p.118)

A major factor is to ascertain that "we take measurements not for the joy of counting, or to provide computer fodder, but in order to prove or disprove some hypothesis". (J.A. Barnes, 1968, p.109.)

Network analysis has been committed by some of its more influential exponents to the production of quantifiable data collected by standardised methods. How far the claims made for it in this sphere have been ^{made} is another matter.

5. Abstraction or generation - the role of the individual and the network

It would seem that in order to justify its focus upon the individual and his network, network analysts would have to accept as a domain assumption, or elaborate as a postulate, the primacy of the individual and his interactions within social life. In fact this problem is rarely explicitly discussed. This omission is quite reasonable, the only drawback being again that ultimately it means some of the potential of the method is lost.

A commitment to the extreme position of methodological individualism - a belief that "all attempts to explain societal and individual phenomena are to be rejected unless they refer exclusively to facts about individuals" (Lukes, 1970, p.82) - is not necessary to justify the ego-centred approach of network analysis, and so I shall not duplicate Luke's discussion of this position here.

The stand of Gluckman, who says "Transaction between individuals cannot explain institutional structures" (1968, p.30) would seem to undermine the relevance of analysis using exchange theory which is a theme of many network studies. Thus, it becomes necessary to assume that network analysts believe that interaction between individuals can explain the workings and generation of social forms.

Gulliver has apparently committed himself to such a view.

"The recurrent mobilisation of more or less the same body of supporters in sequences of action set recruitment and operation, by one individual in a marked and successful leadership role, is the basis of quasi-group formation and of political factions,"
(1971, p.24.)

These ideas derive inspiration from A.C. Mayer's 1966 article, and underly many other network analyses. A concentration upon decision models also implies the acceptance of a particular view of social forms as generated by interacting individuals.

"Such a model, fully worked out, would provide a set of 'rules' for making decisions and for deciding among possible choices in recurrent cultural contexts. From such a model it would be possible to conceive of the effective social units of social action and interdependence that are the epiphenomena of people's decisions". (Gulliver, 1971, p.26.)

The view that social forms are the epiphenomena of interaction of individual choices and decisions, gives added importance to network studies. It is in fact a widely held view, but is rarely stated - probably because it is seen to be a perspective which it is not necessary to dogmatically espouse.

6. Theories explicitly used by network analysts

One of the failings of many network studies recognised by the method's proponents is the lack of any explicit reference to particular bodies of theory - anthropological or otherwise.

"What is badly needed now is the development of a theory which presents a real alternative to structural-functionalism; this last has been discredited but it has not yet been replaced. Until a rival theory is developed that resolves all the anomalies of structural-functional analysis, the theoretical crisis in social anthropology will continue. Network analysis, exchange theory and cultural biology (Harris, 1968) are reactions which express dissatisfaction with structural-functionalism. They all move away from it, yet, as Kapferer has shown, they can in part be made to converge. What is needed now is a greater degree of synthesis to bring the various alternative theories, as it were, together, to combine them into a unified theory which can enlarge our understanding of human behaviour and the patterns it forms."
(Boissevain, 1972.)

I do not see network analysis as anything more than a method which must be allied with a theory. I would agree with Boissevain that network analysis is part of a movement away from structural-functionalisation, but that until the general orientation of such a method is set forth we shall not be able to reach the methods full potential.

e) Exchange Theory

Exchange theory is the most frequently cited theory used by the network analysts. A.C. Mayer's study of the exchanges offered by political candidates in Dewas provided inspiration to many other writers. He pointed out the distinction between patrons and brokers in the types of exchange relationships in which they engage, and mapped out the 'outward', varied transactions, which were reciprocated by 'inward' political support.

Exchange theory also provides linkup with important ideas of generation of social forms which are gaining acceptance in anthropology, notably through the work of Frederik Barth.

Boissevain - in a personal communication - has said that he sees considerable potential in the use of this theory. I would question that it has any lasting validity - in fact, I would expect it to be superceded in the near future, for reasons which I shall suggest.

b) Game Theory

Game theory is closely linked with transactionalism and exchange.

The network studies formally using game theory are, in fact, few. Halkin discusses alliances between Konso towns in these terms, but on the whole reference is made to, for instance, a zero-sum game, on the assumption that the reader can then more clearly understand the social relationships concerned, without a specific game theory analysis being presented.

A most fruitful example of this is Whitten's comparison of his incorporation into social networks by Ecuadoran and Nova Scotian negroes. He concludes "although personal networks are structurally similar in northwest Ecuador and Nova Scotia, the stylized cultural game of exchange thro' them is quite different."(p.400)

Thus vague concepts from exchange and game theory are used by many

anthropologists, but can be particularly relevant within a network analysis.

"The particular formalism of the Theory of Games is not as important for anthropological purposes as is the theory's fundamental character as a generative model" (Barth, 1966, p.5)

It is on this level that game theory has been used by network analysts.

c) Field Theory

Again little explicit reference is made to this theory. Bott however remarks "the basic conceptual model (of Family and Social Network) is that of field theory" (p.4) As such the theory must be given some prominence in a consideration of network analysis.

The formal aspects of Kurt Lewin's ideas have been overlooked and the main contribution has been the stress upon the interdependence of the individual and his environment, which is a basic premise of network method and approaches. Lesser has said field theory brings:

"into one field the study of those patterned interpersonal relationships usually considered merely a matter of historical accident and those that are an integral part of a particular social aggregate. It breaks down the idea that history involves mere happenstance - which interferes with the analysis of social process in system of relations - history and synchronic analysis become parts of one universe of discourse, of one order or level of the human social process" (1931, p. 34)

The broad implications of the theory are again more useful than its formal application.

d) Symbolic Interactionism

Elizabeth Bott also refers to the theories of (G.H. Mead in her book "Family and Social Network". She writes,

"The basic argument of both chapters [VI and VII] is that people do not acquire their ideology, norms and values solely by internalising them from outside. They also rework the standards they have internalised, conceptualise them in a new form and project them back on the external situation. The more varied their social experience and the more unconnected the standards they internalise, the more internal \neq rearrangement they must make. And the more loose-knit their networks, the greater the necessity for them to use constructed reference groups, abstract categories of person, as the referents of their norms and ideology" (p.223, 1971.)

This places the analysis firmly within the tradition of symbolic interactionism. For instance, Shibutani has written on reference groups as perspectives which relates to Bott's understanding in terms of social networks. (1967)

It is this particular theory which I see as holding the greatest interest for future analyses. It is also the area which has received least attention from later writers even when they have cited Bott's work. Boissevain perhaps comes closest to this perspective when he writes:

"Social forms do not drop ready-made from heaven. Nor are they merely taken over blindly from preceding generations, or simply borrowed from neighbouring societies. They are generated or adapted by individuals and aggregates of individuals acting in accordance with their own interests within the limits imposed by existing social forms and values which, in their turn, when generated or adapted in the same way in the past. The social behaviour of man shapes the society in which he lives". (1968, p.545)

This wide-reaching theory has not received the attention it deserves and although I do not wish to suggest that its adoption will solve

all the problems of network analysis, I feel that it could be a useful alternative to the currently more popular exchange theory.

e) Other theories

Other explicitly mentioned theoretical bases for network analyses have been:

1. configurational sociology - Norbert Elias utilised by Banck, 1972. This theory, like field theory, emphasises the impossibility of considering an element - individual, group, etc. - in isolation.
2. communication theory - Mitchell would like to link this with the mathematical constructs of Harary, Norman and Cartwright.
3. sociograms - Mitchell, again, is one of the chief proponents of such bases. He claims that Bott, Mayer and Epstein are involved in the analyses of sociograms.
4. role theory - networks are seen as superseding role theory and yet using many concepts which have been first discussed with reference to role-sets (see D.H. Reader). For Bott's team, role was almost the only concept they shared.
5. cultural materialism - Whitten (1970) has united the concept of network with cultural materialism. However, through a use of theories of minimax the end result is not dissimilar to analysis using exchange theories.

There are clearly more theories than the ones I have mentioned which have been related to network analysis. I hope I have isolated the most important, however, and discussed those which have been actually applied in empirical studies rather than simply listing ideas which have been suggested as having possible relevance which has not yet been demonstrated.

Erratum:

Page 92 has been bound in the wrong order and occurs here directly after page 89. Pages 90 and 91 follow.

CHAPTER IV

INTRODUCTION

1

I have argued so far that the development of network analysis within British social anthropology at this particular time (the late 1960s and 1970s) is inextricably bound up with the appearance of a new paradigm within the discipline. It is essential to describe the latter in more detail to illustrate this central tenet of the thesis, and to appraise the role of network method in such a paradigm.

I shall be drawing on material from related disciplines as well as anthropology since I feel that it is not possible or desirable to isolate intellectual areas. If we accept the influence of experience upon ideas, the central tenet of the study of the sociology of knowledge, it is inevitable that the changes within academic disciplines are likely to be related, if not similar, to one another at any particular time.

"I mean by "new" that something has already happened in British social anthropology (and to international anthropology in related ways) such that for practical purposes textbooks which looked useful, no longer are; monographs which used to appear exhaustive now seem selective; interpretations that once looked full of insight now seem mechanical and lifeless. It is also new that these changes are understood (or misunderstood) by some in quite a different light; that monographs have given way to lightweight essays; where once was reason, unreason reigns; for verifiable postulates speculation is substituted; instead of "reality" we have cosmological (order" (Ardener; 1971, p.449)

* The similarity of Ardener's characterisation of the new anthropology with Toffler's statement of how the world appears to people suffering future shock is surprising.

Lewis Beck was able to point to the fallacies of the 'hard' science paradigm as early as 1949.

"When splitting off from philosophy in order to become scientific, the social studies took a bad moment to imitate the natural sciences. They did so just before the natural sciences themselves began to undergo major changes. The result is that many social scientists pride themselves on being natural scientists or regret that they cannot be, whereas the science they emulate or would like to emulate became obsolescent fifty years ago..... There was no unanimity on the philosophical foundations current among the natural scientists, and the 'unity of the natural sciences' by which they might have served as an unequivocal model, was an illusion even before the death of Comte."

Later he points to the social setting which encouraged the adoption of such a model.

"Every primitive people sees nature by an analogy with its social organization. Science began when laws, like those given by governments and tribunals, were projected into nature."
(in Manners and Kaplan, 1968)

Thus we have the sad spectacle of anthropologists following an ideology, which as Jarvie says is of the order of a cargo cult, in the belief that it will provide a panacea, when it has already been abandoned by the 'hard' sciences in favour, ironically, of more subtlety and greater emphasis upon the individual's intervention and creativity.

"Science, as J.B.S.Haldane used to mutter, is not a science. It does not operate like Mathematics, working with rational objectivity from problem to solution, until it reaches a Q.E.D. Instead, all the true advances in human knowledge have been gained by hunches and guesses, accidents and coincidences, making errors, but correcting them on the way."

(Alen Brien, New Statesman,
4 June, 1971.)

(Such is the thesis of Thomas Kuhn's book, in which he draws on

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 Ardener's view of what is happening in anthropology illustrates clearly that, in Kuhn's terms, a ^{new?} paradigm has occurred. This invalidates much of the past work done in the discipline and creates enormous confusion over what is 'fact' and 'reality'. Ardener sounds here as if he is an adherent of the old paradigm but I realise that this is a Catch-22 type of accusation - in that if he does not accept as true what I also believe it is all too easy to dismiss it in those terms. However, it is of enormous interest that while many people recognise that a change has occurred, the direction of the change is taken as totally different by different anthropologists. I suspect that Ardener and myself would disagree profoundly on almost every point.

"There has occurred an epistemological break of an important kind. So far, in that sense there is a new and an old anthropology. There is a position acquainted with neighbouring disciplines, which sees the new anthropological movements as part of a change of mind in science itself."

(Ardener, 1971, p.449)

It is this latter position which I would like to discuss now.

The Rejection of the 'Hard' Science Paradigm

In claiming that the 'hard' science paradigm is irrelevant for the present theoretical position of anthropology, I do not wish to enter into a discussion of the disciplines artistic or scientific status.*

The search for laws with which to predict and control social life, and the striving towards an objective truth are major distortions of a natural science paradigm which has dogged the social sciences. It is this positivist distortion of the nature of science which has now been rejected.

* I can see that there are enormous differences between the work of the artist and the scientist.

As Bateson has said "The artist is content to describe culture in such a manner that many of its premises and the interrelations of its parts are implicit in his composition. He can leave a great many of the most fundamental aspects of culture to be picked up, not from his actual words, but from his emphasis. He can choose words whose very sound is more significant than their dictionary meaning and he can so group and stress them that the reader almost unconsciously receives information which is not explicit in the sentences and which the artist would find it hard - almost impossible - to express in analytic terms. This impressionistic technique is utterly foreign to the methods of science..."

examples from the physical sciences to illustrate this crucial point in great detail.)

The awareness of how haphazard scientific advance is, and the enormous role the idiosyncracies of the individual play in it, is increased by reading such books as The Double Helix by James Watson, in which he describes the discovery of D.N.A. in very personal terms. In fact Cooley has pointed out that a rapprochement of quite a different kind is possible.

"There is indeed one way in which physical and social science may be assimilated. We may find that atoms and electrons are not so uniform and reliable as has been believed, that the supposed physical laws are only statistical, covering diversity in the phenomena somewhat as social statistics cover the diversities in individual men. Indeed we are told, by men apparently competent that 'the present state of physics lends no support whatever to the belief that there is a causality in physical nature which is founded on rigorously exact laws. In some such way as this the gulf may be bridged, but never, I think, by reducing the human will to zero."

(Cooley, p.80, in Manis & Meltzer)

Cooley wrote in 1956, and since then the physical sciences have moved in just the directions he suggested, even to the extent of having to admit that the act of observation of an experiment may alter its course.

The sad fact is that social sciences have followed an already redundant paradigm, when their own held the key.

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As Kuhn points out it is ironical that ^{physical?} scientists should have written to congratulate him on his book 'The Structure of Scientific Revolutions', remarking that it resembles closely the way their disciplines advance, when he himself derived those ideas from social science.

There is another issue at stake here, however. If one were to accept the particular paradigm supposedly prevented by the 'hard' sciences with its emphasis upon objective deduction of laws - how far can it be applied to social studies? It seems doubtful that it can be of any relevance.

Remford Bambrough has likened trying to analyse social phenomena in the terms of the natural sciences to a Martian observing a game of chess. He can see the moves and patterns but cannot understand the system. The impossibility of dealing with a creature who can monitor his own performance, deceive, understand as a human being does, in the concepts and terms of natural science is obvious. *

* It also leads to pretentious and laughable conclusions. "Harvey Sacks, a sociologist with an uncanny sensitivity to linguistic behaviour, demonstrated that a conversation is a highly structured event and the rules of sequence organisation can be formally described. Several years of careful study of conversations have paid off in the discovery of many subtle aspects of this speech event. In his presentation at the conference, he argued that conversations can be characterized in terms of two general principles towards which participants always orient themselves.

1. At least one and no more than one person talks at a time.
2. Speaker change recurs."

Joel Schezer
Language Sciences

Quoted in Private Eye, May 1971.

In 'pseuds corner' appropriately enough, which is surely a place to be avoided! /

"We shall say that a 'human science' exists..... wherever there is analysis - within the dimension proper to the unconscious - of norms, rules, and signifying totalities which unveil to consciousness the conditions of its forms and contents. To speak of 'sciences of man' in any other case is simply an abuse of language. We can see, then, how vain and idle are all those wearisome discussions as to whether such and such forms of knowledge may be termed truly scientific and to what conditions they ought to be subjected to become so. The 'sciences of man' are part of the modern episteme in the same way as chemistry or medicine or any other science,... But to say they are part of the epistemological field means simply that their positivity is rooted in it, that is where they find their condition of existence, that they are not merely illusions, pseudo-scientific fantasies motivated at the level of opinions, interest or beliefs, that they are not what others call by the bizarre name of 'ideology'. But that does not necessarily mean that they are sciences." (p.365, Foucault, 1971).

I do not intend to embark on that wearisome discussion since I feel my case that anthropology can never be a science in the sense that the emulations of the 'hard' sciences hope for, rests firstly upon the impossibility of being objective in the sense required by that paradigm, and secondly upon the fact that the paradigm is not that of sciences such as physics at present anyway.

The natural sciences are no longer revered as representing a way of thought which provides a valid model for the 'soft' sciences. In fact attitudes to science have altered, as has the form of science itself.

Anthony Storr speaks for many when he says

"It seems to me there's a very great simplification in thinking that there is something called science, with a capital S, and that other things that don't

quite measure up to that paradigm are disreputable... it's long been my supposition that some of the pictures of the modern world, which for instance, modern physics presents us with are actually much more subjective constructions than scientists would like to have us think - useful but not bedrock, as proveable in reality". (1971)

Many network analysts are in disagreement with this aspect of the new paradigm. As I have shown, they seek to emulate the 'hard' sciences in many ways.

3

The Focus upon the Individual and Microanalysis in British Social Anthropology

Malinowski saw needs as explaining the behaviour of individuals, while groups explained the socialorganisation of a culture (1939). He felt that the two levels of analysis should be carried out at the same time. Since then the emphasis has shifted towards the individual and his decisions as determining the form of the social organisation. This is clearly a radical reorientation, and one which is inextricably linked with emic approaches and the wider concept of intersubjectivity.

Barth has adopted a point of view which emphasises the haphazard way in which social forms appear as a result of individual acts.

"I would argue that it is not useful to assume that this empirical pattern (of behaviour) is a sought for condition which all members of the community equally and wilfully maintain. Rather it must be regarded as an epiphenomenon of a great variety of processes in combination, and our problem as social anthropologists is to show how it is generated ... The ubiquitous beer party guest, who is exchanging labour directly for beer, does not ask himself how will this allocation affect our

system of social stratification? Yet his allocations made on the basis of limited considerations do in fact create directions and constraints on possible change."
 (Barth, 1967, B, pp.222-3)

As Leach has said, the anthropologists problem becomes -

"Just how [does] the social fact of normal behaviour emerge from a series of seemingly arbitrary individual choices?"

(1961, p.98)

It is argued, for instance, by Manners and Kaplan (1971) that one of the specializations of social anthropology which can save it from extinction, or absorption into sociology is its particular concentration upon microprocesses, and small group analysis using participant observation. Interest in such methods as situational analysis, social dramatisation and extended case analysis in anthropology also emphasises the importance of the individual in social science. Other areas of interest reflect this - for instance the study of local level politics and of manipulation of an existing political structure by the individuals involved in it. A new view of man is implied - a man who is able to manipulate his social environment, and even to create it.

Pons claims that his detailed analysis of social relationships "showed conclusively how interpersonal relations and "small-group" interactions were related to the continuous processes of elaborating norms, of communicating "civilization" to newcomers, and of assessing newcomers in terms of their ability to establish varied sets of social relations within diverse situations."

(1969, p.274)

The interest

in communication and socialisation is part of a far wider shift in the currently accepted philosophies of social life.

Southall has also said that small groups provide a useful level of analysis with their consequent focus upon the individual. Such a study

"constitutes a special approach to the study of face-to-face relationships in small clusters within larger populations which seem to lack corporate structures except as a wide impersonal framework. The object is both to study small groups for their own sake and to see how the wider corporate structures impinge upon those who compose them, that is how continuous chains and interlocking networks of role relationships link the members of small groups of the structures of the wider society and the people who play key roles in them. The small groups themselves may not necessarily be the units of analysis, there may seem to be few if any coherent small groups at first sight. The object of study then is to discover the type and the channels of interaction between persons, and the extent of regularities which give a minimum of coherence and order to social life .. The effect of this approach is to enlarge the field of positive knowledge by defining, or approaching a definition of situations hitherto regarded as presenting an unstructured fluidity which defied possible analysis."

(1961, p.25)

Thus it seems apparent that a general shift towards the micro-level of social analysis has occurred.

This has been brought about partly because anthropologists studying urban areas have been forced to accept that social life continues and is intelligible to the individuals concerned, although it at first appears hopelessly confused to the outside observer. This reflects back to Pocock's suggestion that we must think how the Nuer, for instance, see social change, and relate it to ourselves. I have quoted extensively from Plotnicov and other writers in Chapter I to illustrate this point. It is worth reiterating again to emphasise that it also encourages a concentration upon the individual.

"This crisis (56% unemployment) and its effects, although shaping the situation which this study is concerned to describe, did not provide entirely new structures or patterns of organisation. It simply introduced new factors with which the existing organisation had to contend. One can best understand and analyse these facts by using the approach that the citizens of Leopoldville, whatever their status must live according to the realities of the social situation. These realities fall into various categories - political, social, economic, which one may term sets of "givens" or "frameworks".... Within each framework the regularities of structure, common beliefs and activities can be analysed with reference to the goals of citizens who manipulate the givens to further their own aims. In Leopoldville, leaders and followers operate within the same frameworks, but leaders seek prestige, influence and power, whereas ordinary men seek merely to live."

(La Fontaine, p.4, 1970)

Gutkind makes the same point -

"The emphasis should be laid clearly on the words "apparent lack of unity" simply because there is order and regularity in African urban areas, however heterogenous, but integration takes place around variables which in the past have not been associated with structural regularity."

(1965, B, p.128)

Reader also emphasises the place of the individual in urban anthropological studies.

"Two basic presuppositions to the urban approach now seem to receive fairly general assent. One, as Little has said of West Africa, is that instead of viewing the contemporary urban situation as a juxtaposition of two or more different cultures, it is better to conceive it as a process of adaption to new circumstances. (Little, 1957, p.580) The other is that where social heterogeneity makes it impossible to work from the concept of society it is helpful to proceed from the reference point of the social individual. The social environment becomes a construct over which they have some control by seeking some relations and avoiding others, by accepting the norms of some reference groups and not others."

(1964, Reader, pp.28 and 21)

This reappraisal of the unstructured urban environment is clearly a part of a paradigm shift, in which the very facts

of a science are challenged. In this particular case, actor-oriented approaches have become particularly relevant within anthropology as a result.

The distinction between actor-oriented and emic studies is, in this area, to some extent one of degree. In other situations it becomes clearly one of kind. The influences which have brought both approaches to prominence in recent years, are similar, however, and are also responsible for the interest in networks.

"Certainly no modern anthropologist would consciously try to separate thought from action in the society he studies. But the understanding he communicates is better to the extent that he departs from the conventional sociological view that the individual is irrelevant."

(Pocock, 1961, p.110)

Network analysts have for the most part embraced this aspect of the new paradigm wholeheartedly, but not all have utilised the ideas of ethnoscience, which are a logical extension of the focus upon the individual.

4

Emic Approaches and Ethnoscience in Anthropology.

A most important shift in emphasis within anthropology in recent years has been toward the analysis of emic units. Such an approach has been much in evidence in America for the past decade but received little attention in British social anthropology until recently, and has not yet been much utilised in network studies.

"One diagnosis that has been offered for the theoretical and methodological 'crisis' in anthropology holds that

our problems grow out of a particular kind of weakness in the strategy of conceptualisation in most ethnographic descriptions. According to this view, cultural behaviour should always be studied and categorised in terms of the "inside view" - the actor's definition - of human events. That is, the units of conceptualisation in anthropological theories should be "discovered" by analysing the cognitive processes of the people studied, rather than imposed from cross cultural (hence ethnocentric) classifications of behaviour. This point of view is variously referred to as "New Ethnography" "Ethnoscience" or "ethnosemantics" ."

(Pelto, 1970, pp.67-68)

The commitment becomes toward explaining or understanding meaningful behaviour in its own terms. This has far ranging implications and relates to many other new emphases in anthropology.

As Pelto remarks

"If either the emic or the etic 'side' of the argument is overwhelmingly right in its assertions, the work of the other must be regarded as nearly totally worthless. The main directions of future anthropological study are clearly involved in the controversy."

(Pelto, 1970, p.82)

It is therefore essential to examine the present position of network analysis visà vis this problem, and to suggest what reorientations might or should be made.

I shall argue that one of the major failings of network analysis has been an attempt to present objective data (in the terms of a 'hard' science paradigm). I also suggest that one of the best ways to overcome the problems posed in writing about social life is to attempt to expose one's own bias (not meant as a derogatory term here) and understand it as far as possible oneself. The danger of solecism is eliminated if it is possible to accept that to make knowledge more useful,

more available to other people, is to make it objective in a meaningful way. Clearly, the desire to explain one's own standpoint is not enough however. There must be some other perspective to be substituted for our own as far as possible. The only relevant one is that of the people being observed (with whom as observer one is interacting).

I find myself in agreement when Gluckman writes of Radcliffe-Brown and the following generation of British social anthropologists, that

"In order to demonstrate the existence of system at all, we discarded much of the living reality about which we had collected material."
 (p.ix, foreword to 'Schism and Continuity', 1957)

Such studies containing mixtures of emic and etic (the latter predominating) are full of unsupported generalisations and are dull to read because meaning has successfully been eliminated along with other problematic features of man's interactions. They belong outside the tradition in British social anthropology which is at present providing the most stimulus to the disciplines' development.

This latter tradition derives from the work of Evans-Pritchard, who placed social anthropology as a branch of historiography rather than of the natural sciences. He envisaged the first stage of anthropological work as the understanding of a culture and its translation into terms understandable by members of another culture. In his study of the Nuer the importance of context became evident for instance in the use of the word "home" -

"If one meets an Englishman in Germany, and asks him where his home is, he may reply that it is in England; if one meets the same man in London and asks him the same question he will tell one that his home is in Oxfordshire, whereas if one meets him in that county he will tell me the name of the town or village in which he lives."

(The Nuer, p.136)

Pocock has pointed out that such thought owes more to the French school rather than the British. He says that

"the authors refusal to make explicit the shift in emphasis had certain tactical advantages. No storms brew up which might have obscured the presentation under a storm of dust, a sense of continuity was preserved..."

But the shift was to an acceptance of the actor's definition of the situation

" and this must be the anthropologists' starting point."
(1961, p.79)

The attempt to take the actor's view has become a major element in much of British social anthropology. For instance, Jarvie has called for the use of Popper's situational logic to explain how a person chooses between the alternatives open to him in a particular situation. Swartz has said that political rules, which are for him a major part of political anthropology "constitute the actor's model of his own situation". Pons has remarked on the fact that apparently irrational urban behaviour can be seen to be understandable in its own terms.

Plotnicov also has said that

"if contradictions [in a person's actions] are present they are in the mind of the observer not the observed. For the participant the institutions exist to be used and exploited, neglected or avoided."
(1967, p.11)

Burridge has expressed the same idea with reference to his study of cargo cults -

"New ideals, new assumptions certainly (which exist with cargo cults). But whether or not they are bizarre is entirely subjective. No one, it may be assumed, does seriously what he himself thinks is bizarre. Just as other kinds of seemingly strange and esoteric activities in foreign cultures have yielded their mystery to investigation, so again and again the apparently bizarre in millenarian activities has been shown to be unexceptionable in the circumstances, given the premises."

(1969,p.9)

Of wider implication is the fact that Exchange theory must ultimately rest upon an understanding of the relative values of the transactions as perceived by the actors themselves. As Barth has said pay-offs

"must be seen from the point of view of actors or other concrete units of management that dispose over resources and make allocations."

(Barth,1967, B,p.667)

I have already discussed the overwhelming importance to network analysis of exchange theory and since it is clear that the actor's definition of the situation is crucial to that theory, it is apparent that the emic approach and network analysis must be related in many ways.

However, there have been extremely few network studies which have made use of this orientation specifically. Elizabeth Bott presented her analysis of class as a subjective world view which relates to the individual's experience of that system. She was also well aware of the fact that the interaction between interviewer and interviewee would colour the information which was collected. The awareness of such subtleties is rare in network analyses. Whitten's comparison of Ecuador and Nova Scotia parallels this - in fact he perceives

the differences in the cultural game of exchange in terms of the way in which he was incorporated into the two societies. Parkin similarly views his fieldwork experience as "developing into a type of network analysis, with myself as an integral part of the network".
(1969, p.v)

The attempt to present a network study in which an integral part of the network - the anthropologist - is entirely omitted is a fatal mistake, and stems from a belief in positiv⁶istic analysis and a lack of distinction drawn between emic and etic approaches.

"The chief value of an anthropological approach to sociological questions lies in my view, not in the intensive analysis of multiplex relations as has sometimes been suggested (Banton, 1964) but rather in the clearer identification of the contrasts and connexions between the concepts used by actors and by observers, between emic concepts and etic concepts, as they are sometimes called."

(Barnes, 1970, p.15)

In not making clear this distinction, the network analysts have thus been ignoring one of anthropology's major contributions to social analysis. Although it would seem that the close examination of an individual's relationships which is the essence of network analysis must inevitably require an attempt to understand those relationships as the actor does - in fact, other related anthropological methods have made more use of emic analysis.

Analyses such as Bailey's (1969, 1971) and Swartz's (1968) of local level politics and processes rely, through their utilisation of ideas of transaction and exchange, on an understanding of the goals and values of the particular society being

examined. Only when these are comprehended can normative and pragmatic rules, estimates of resources and so on be extrapolated.

Some methods which have been related to network analysis in the past (eg, Reader, 1964) as being basically similar in orientation, particularly in their emphasis on the importance of the individual, have, in fact, been used rather differently from network analysis. Situational analyses and the extended case method have both been developed - as has network analysis, ^{though} ~~the~~ less exclusively so - by the prolific and impressive Manchester School.

Van Velson's aim is to "explain by the same process as I gained my insight" (p.xxviii, 1964). In this he resembles the network analysts I have cited above who see as crucial their own learning and adaptation in a new cultural milieu. It also echoes the desire of the New Ethnographers to be able to produce a set of rules which would enable an outsider to enter such a new milieu and operate successfully within it. Again the social drama is

"a description of a series of unique events in which particular persons, impelled by all kinds of motives and private purposes interact in many different ways."

(Turner, 1957, p.330)

The social drama method of analysis has gained the greatest acclaim of these three methods mentioned above but they all recognise the importance of the fact that "General forms have their vitality in particulars" - Turner's motto (1957, p.329).

They are, however, more readable than network analyses - the reason being that they are more in tune with the new paradigm - a major element of which is the acceptance of the actor's understanding of the situation. There is in fact an enormous divergence between these types of analysis and the more pedantic network analyses. The latter attempt to be formalistic and obviously scientific while the former incline to the form of a novel. The ethos is quite different. Similar reorientations towards a focus on individuals and their understandings have occurred in other social science disciplines.

a) Linguistics Reorientation

The formulation of the distinction between emic and etic approaches is credited to Pike, who derived the actual terms from the words "phonetic and phonemic" in linguistics. The revolution in linguistics thus parallels that in anthropology.

"The significance of the methodology outlined here (Frake's 1962 paper)... goes beyond its contribution to descriptive ethnography. The strategies outlined here promise a revolution in cultural anthropology, comparable to that which took place in recent decades in linguistics. Linguistic analysis has cast aside the mould of the classical grammars to describe each language in terms appropriate to its own structure. Ethnography is struggling to break the mould of the categorical outline of culture which most anthropologists now take with them to the field."
 (Gladwin and Sturterant, 1962, p.72)

In linguistics the scientific revolution (I refer again to T.S.Kuhn's work) is traced back to Chomsky's work. Before 1957 linguistics was behaviouristic, and positivistic.

Chomsky

"brought about a revolution by saying that the most interesting thing about language and what we should direct our attention to .. is what the native speaker knows intuitively about the structure of his language."

(Thorne, 1971)

As Thorne points out this is a paradigm change in Kuhn's terminology, in that the nature of what is accepted as 'fact' is changed. Labov and other linguists have provided inspiration for anthropologists, and although the formalisation of linguistics is sought for but cannot be applied usefully to many areas of social life, the general reorientation brought about by the emic approach has profoundly altered anthropology.

"We always talk about structure, but essentially when we're talking about structure what we're concerned with is "meaning"."

(Thorne)

Similarly in anthropology, the meaning of actions is to be sought, and it is this which, in some studies at least, is rectifying the sterility of discussions of life in terms of purely etic concepts.

b) Psychiatry

A similar movement within psychiatry has revolutionised that science. R.D.Laing is the prime mover in this case. He has argued that the person who is diagnosed schizophrenic may well be acting rationally in terms of the impossible situation in which he is trying to exist. This view has created enormous controversy since it essentially overthrows

many of the assumptions which people are used to being able to make.

"To create this religion [Anti-Psychiatry] it was necessary to say that rationality, the great achievement of natural and social science (which had between them more or less destroyed religion), wasn't such a good thing after all: that the irrational, the untenable, the unjustifiable, the completely crazy was (or could be) truly marvellous and worthy. In the construction of this science-based religion, the irrational was upgraded by elevating and celebrating human madness and Anti-Psychiatry became the new human science - permissive and indulgent towards the irrational - as a substitute for that nasty old Psychiatry, which was of course thoroughly and most unpleasantly rational often to the point of downright atheism."

(Sedgwick, 1972)

In fact there is much confusion over what exactly Laing's position is. Others who have followed his lead have made more extreme statements than Laing himself and since he has left for Ceylon there is no one who can clarify with any authority. However, the fact remains that Laing and Anti-Psychiatry (which in fact owes more to D. Cooper) are seen to have made a ferocious attack on the existing social order, and are perceived by many as an extremely threatening force. Sedgwick accuses Laing of propounding a 'religion' - a word which seems to be used derogatorily to imply that such beliefs are irrationally held. It is interesting that the scientific method was called a religion by Jarvie in his discussion of the revolution in anthropology. The invalidation of a way of thought in this way is not nearly so fruitful as an attempt to understand it in its own terms.

Leach has interpreted Laing and Cooper as saying

"Quite openly that they are more concerned with the

revolutionary transformation of the world than with healing the mentally sick". (1971)

Books such as 'Death of the Family' do attack enormous areas of our present social structure, but a panic reaction over-exaggerates their implications in many ways. Leach also links the more extreme sects of the past - for instance the Fifth Monarchists - with the existential psychologists' interpretations of the world. In this way he points to the transience of such changes of world view and effectively makes them look quite foolish.

"The effect is achieved not by argument but by incantation. Any field anthropologist will readily recognise the genre; the repetitions, the non-sequiturs, the far-fetched but highly conventionalised metaphors, are all quite typical of the magical verbal accompaniment of healing rituals as reported from all over the world."

(Leach, 1971, Review of 'Death of the Family' in The Listener)

The discussion of the book 'Death of the Family' in these terms seems to me to be making an analogy which is extremely far-fetched, but illustrates again how threatened Laing and Cooper can make people feel, so that they are forced to retaliate in the most ferocious way.

"What needs to be understood is that books like this are a symptom not a cause. The Times ran a special centre-page review of the book on the day before publication, it would not be described as a favourable review but that any book so superficially crazy should be singled out for such treatment is highly significant. The Millennium is not at hand, but the Reformation is well underway."

(Leach, 1971)

The correspondence following this review pointed to a number of misapprehensions on Leach's part. "Laing has nowhere

commended any anti-society or anti-state" .. wrote one reader, who also pointed out that Bateson's theory of schizophrenia which Leach had summarised as being that schizophrenia "is generated by family life" was in fact based upon Russell's theory of Logical Types, and, interestingly, the Theory of Games, of Von Neumann and Morgenstern, and was not intended to apply to all families, Leach replied to the criticism and denied that anthropologists "believe the distinction mad/sane is purely conventional and relative" and I have yet to meet any anthropologist, with field experience, who had any doubts at all about the relative effectiveness of healing rituals in Western and non-Western medicine".

The furore that existential phenomenology has created within psychiatry has had enormous repercussions elsewhere, involving almost all aware social scientists. I would suggest that its central tenet - the validity of the individual's own experience of the world - has been accepted to a far greater degree than one might suppose, and that this is of far greater interest and significance than the arguments as to Laing's exact position, his use as a cult hero and so on.

Storr has said "ultimately what I'm concerned with is the patient's subjective experience of the relationship they're having", when discussing dynamic psychology with Remford Bambrough. He has also stressed that 'you've only got a person when there are two people present either in fantasy or reality, that unless you have somebody to relate to you don't exist as a separate reality'.

This type of philosophy is accepted by many social scientists and profoundly alters their work. It is in relation to wide movements such as this that the appearance of the emic approach in anthropology and network analysis must be seen.

c) Philosophy

Phenomenology has provided the inspiration for many of these reorientations. The founder of phenomenology was Edmund Husserl (1895-1938). He argues that Objectivism or Positivism took over European thought in the seventeenth century - in the writings of Galileo. Thus

"for 300 years western thought has been diligently ignoring the entire world of sense - impressions, emotions and all the realities that make up our everyday world".
(Poole, 1972, p.82)

Descartes followed up

"the question of reducing the real world to a mathematical picture of it". (Poole, 1972, p.84)

He refused to consider perspectives and his own affectivity, preferring to consider only objective facts. From this, rationalism and empiricism have developed.

Husserl stressed the existence of a myriad of different perspectives each pertaining to a different individual. Following from this the necessity of looking as far as possible at the totality, the interrelationships of the world are apparent.

"Let us direct our attention to the fact that in general the world or rather, the objects, are not merely

pregiven to us all in such a way that we simply have them as the substrates of their properties but that we become conscious of them ... through subjective manners of appearance, or manners of givenness without noticing it in particular; in fact, we are for the most part not even aware of it at all. Let us now shape this into a new universal direction of interest; let us establish a consistent universal interest in the "how" of the manners of givenness - that is, with our interest exclusively and constantly directed toward how, throughout the alteration of relative validities, subjective appearances, and opinions the coherent universal validity world - the world - comes into being for us."

(Husserl, p. 44, 1970)

Husserl recognised that the method of tackling the problem of subjectivity by paying attention to the totality was one which would be problematic to embark upon, but quite essential if we are to gain any new understanding of life. The challenge has been taken up by later writers however, and has gained increasing prominence in recent decades.

Alfred Schutz has elaborated and clarified the tenets of phenomenology,

"what counts is the point of view from which the scientist envisages the social world .. this central point of view of the scientist is called his "scientific problem under examination".

(p.188, Emmet and McIntyre, 1971)

The problem defines the limits of relevance of the inquiry, and also provides a scheme of reference for the construction of relevant ideal types. The principle of relevance points out that no "type" can exist independently of a reference scheme. A shift in the problem thus involves a shift in point of view and in the relevant elements under examination. Misunderstandings abound because this ultimate relativity is overlooked by social scientists.

"The social scientist must therefore ask, or he must at least always be in a position to ask, what happens in the mind of an individual actor whose act has led to the phenomenon in question. We can formulate the postulate of the subjective interpretation more correctly as follows: The scientist has to ask what type of individual mind can be constructed and what typical thoughts must be attributed to it to explain the act in question as the result of its activity within an understandable relation.

"This postulate finds its complement in another which I propose to call, borrowing a term from Max Weber, the postulate of adequacy. It may be formulated as follows: Each term used in a scientific system referring to human action must be so constructed that a human act performed within the life-world by an individual actor in the way indicated by the typical construction would be reasonable and understandable for the actor himself, as well as for his fellow men."

(p.111, 1971)

As a result of Schutz's postulates and the key concept of rationality there is only one reasonable course left open to the social scientist -

"Everyone to become a social scientist must make up his mind to put somebody else instead of himself as the centre of this observed world, namely, the observed person."

(p.106, 1971)

To understand the actor's view is thus the aim of social science. In this, Schutz and phenomenology possibly go further than most emic oriented anthropologists.

d) Social Psychology

G.H.Mead, who is regarded by many as one of the most influential social psychologists, again stressed the intersubjectivity required to enable the actions of several individuals to be coordinated. The theme is similar to

that of Schutz in that the existence of as many viewpoints as there are individuals is accepted as axiomatic. Symbolic interactionism - the school which derives its inspiration from Mead - has elaborated the concept in terms of the creation or generation of social forms. At present it is sufficient to point to the fact that here again the aim of understanding as if one is the observed is a basic element.

e) Sociology

Erving Goffman, whose work has influenced sociology in particular, has examined social life at the level of the individual and microprocesses (a level which network analysis assumes also to be of relevance for the understanding of human life). Goffman's assumptions - as set out in his book 'Strategic Interaction' (1971, pp.4-8) - are remarkably similar to those of Mead and his emulators. There is the same expressed interest in the importance of language and symbols communicated between interacting individuals. The individual is recognised to be in control of his "impression management" and to be able to manipulate the signs and symbols to certain ends. In this respect he is a different concept entirely from the ratomorphic man of Skinner and the behaviourists. (Again this is a crucial element to which I shall return). Goffman's understanding of social life depends enormously upon an internal understanding of situations, since the individual is able to project an impression which he himself knows to be false, and to play at roles which he is "attached" to but does not "embrace". The

existence of a 'self' behind the role is taken for granted.

"The individual is denying not the role but the virtual self that is implied in the role for all accepting performers."

(p.61,1969)

This leads to the existence of "role distance". The implication of Goffman's analyses is that the individual can preserve his own self image by manipulating the situations in which he finds himself. A basic premise of Mead's and Goffman's is that the individual can negotiate with interacting others in a situation to impose a particular definition on the situation. Once this is done behaviour is judged appropriate in the terms of that definition. The actor's definition is very much a controlling force and one which has to be understood, since actions are not evaluated in terms of function but in terms of what is held to be acceptable. The interdependence of the actors is of crucial importance. All these elements of interaction are stressed by network analysis.

Another stream of thought which is in vogue at present in sociology is ethnomethodology. Garfinkel has been influenced to a great extent by Schutz's phenomenology. Like Luckmann & Berger he is interested in the shared tacit rules that enable social interaction to occur. Luckmann & Berger call this recipe-knowledge, while Schutz names it cookery book knowledge. These hold the social world together -

"a dense collective structure of tacit understandings (What men know and know others know) concerning the most mundane and "trivial" matters, understandings to which no special importance, let alone sacred significance, is normally attributed, if, indeed, they are noticed at all." (Gouldner, p.391,1971)

In order to elucidate such understandings, Garfinkel attacks our commonsense understanding of reality. For instance his students are told to feign ignorance of ordinary phrases.

"Garfinkel seeks to understand social situations from the "inside" as it were, as it appears to the men who live it; he seeks to communicate their sense of things, with an almost Nietzschean hostility to conceptualization and abstraction and particularly by avoiding the conceptualizations conventional to normal sociology."(Gouldner, 1971, p.394)

This resembles closely Husserl's phenomenological "suspension" of belief in reality. To me this seems to be the logical outcome of phenomenological studies and of the emic approach within anthropology. It reflects back to the perception of anthropology as translating between cultures. Ultimately however, the result must be a return to almost novelistic type writing - which the social drama method and so on already pre-shadow.

Another recent addition to this type of approach is that of "everyday sociology" as presented by Jack B. Douglas. He argues that ultimately all our knowledge of social life is inevitably based upon commonsense understandings.

"... there is no way of getting at the social meanings from which one either implicitly or explicitly infers the larger patterns, except through some form of communication with the members of that social or group, and to be valid and reliable, any such communication with the members presupposes an understanding of their language, their own understandings of what the people doing the observations are up to, and so on almost endlessly."

(p.9, 1971)

I do not wish to go further into distinctions between, for instance, linguistic phenomenological sociologists, situational

phenomenological sociologists and so forth. The main point is that all these approaches require an acceptance of the importance of the individual's own view of a situation as a basic element in the understanding of any situation.

In fact exchange theory implies such a view in that, as I have pointed out, payoffs are defined by the actor. Similarly, it is basic to the decision model which is of increasing importance in social science. Keesing (p.2,1968) describes a decision model as

"an ethnographic description which is actor-oriented and based on the categories of the culture under study i.e. one that is emic."

"The step of taking the commentaries of social actors seriously - as genuine but revisable, reports of the genesis of social behaviour corresponds exactly to the step made by chemists in the mid nineteenth century, when they boldly espoused the seemingly bizarre theory that chemical reactions were produced by an exchange and rearrangement of fixed chemical atoms. After 50 years of scornful dismissal Dalton was suddenly discovered to be the "father of modern chemistry". The true nature of chemical change is the rearrangement of atoms; and the true nature of human social action is the conscious self-monitoring of behaviour, according to plans, rites and conventions."
(Harré,1971, p.582)

From this emic approach many corrolaries of enormous importance follow. This is the basic and fundamental element of the new paradigm and I hope I have shown that it is a wide-spread and accepted mode of thought, but one which has not always been fully developed in network analyses.

5

Reappraisal of Concepts in the Context of the New Paradigm

As this reorientation in the direction of actor-oriented approaches has taken place, many concepts have had to be reappraised. Some have been redefined, others rejected, while others have come to be more prominent in the context of the new paradigm.

a)

Role and Choice

In the 1950's and 60's role was a central concept in sociology in Britain and America (Banton and others have discussed the terminologies and slightly differing concepts of role used by different writers so I shall not discuss that here). The emphasis was upon the individual as a socialised being who fitted into various roles which existed within the social structure.

"Subgroups, like the widest group the society at large, are made up of people in determinate stable relationships."

(Nadel, p.13, 1957)

"We arrive at the structure of a society through abstracting from the concrete population and its behaviour the pattern or network (or 'system') of relationships obtaining "between actors in their capacity to play roles relative to one another." (Talcott Parsons, 1949, p.43, Essays in Social Theory)"

(Nadel, 1957, p.12)

Linton defined role as a dynamic concept

"A status, as distinct from the individual, who may occupy it, is simply a collection of rights and duties ... A role represents the dynamic aspect of a status ... when (an individual) puts the rights and duties into effect, he is performing a role".

In this way role playing is observable in behaviour.

In anthropology Mael examined the concept in great detail.

"Role provides a concept intermediary between 'society' and 'individual'. It operates in that strategic area where individual behaviour becomes social conduct, and where inequalities and inclinations distributed over a population are translated into differential attributes required by, or exemplifying the obtaining social norms."

(Mael, 1957, p.20)

By 1965 Mair wrote

"most British social anthropologists now use as key terms in their discussion of social behaviour the concepts status and role." (1965, p.22)

The relevance of the individual as opposed to that of institutions was thus firmly established. Role was elaborated upon by Merton in particular, but its more recent exponents have adopted the idea that the individual can choose the definition of the situation in which he finds himself - one of the important elements being the choice of role - and that through negotiations over the 'correct' definition of a situation, common understandings develop. These understandings are the basis of symbolic systems, and, ultimately, culture.

Goffman's analyses use role - but his role players are able to choose whether or not to embrace their role - they can, if they wish, remain at a distance from it. The process of arriving at a shared definition of the situation becomes the focus of interest, involving skewed communication and other devices which the actor can use.

"In pursuit of their interests, parties of all kinds must deal with and through individuals ... In these dealings, parties - or rather persons who manage

them - must orient to the capacities which these individuals are seen to have and to the conditions which bear upon their exercise, such as innate human propensities, culture bound beliefs, social norms, the market value of labour, and so forth. To orient to these capacities is to come to conclusions, well founded or not, concerning them; and to come to these conclusions is to have assumptions about the fundamental nature of the sorts of persons dealt with.

These assumptions about human nature, however, are not easy to uncover because they can be as deeply taken for granted by the student as by those he studies. And so an appeal is made to extraordinary situations wherein the student can stumble into awareness. *

In this paper I want to explore one general human capacity in terms of the conceptions we have of its physical and social limits. The individual's capacity to acquire, reveal and conceal information."

(Goffman, pp.3 & 4, 1970)

The recognition of the central importance of information, and following this of man's ability to control information, alters totally the concept of role. The notion of role is thus still used in sociology but has undergone profound changes.

"The idea of role taking shifts emphasis away from the simple process of enacting a proscribed role to devising a performance on the basis of imputed other roles".

(Turner, in Rose Ed., 1962,
p.23)

These changes relate to other assumptions of the new paradigm,

* I have quoted at length here to point to the similarities between this and ethnomethodology. The search for the unspoken background assumptions of a culture is a major focus in these studies. Anthropology has huge potential here in that in the personal crisis of carrying out field work all the assumptions of the anthropologist are questioned and he should reach down to gain an understanding of the more tacit levels of meaning - as Goffman says - stumble into awareness. In this way anthropological fieldwork seems likely to gain in importance within this new paradigm.

which concentrate attention on the individual, but go beyond the original shift toward the individual which brought role analysis to such prominence.

The recognition of the individual ability to exercise discrimination and choose between alternative actions provides the basic premise of exchange theory. One of the areas in which he can choose is his role.

"A man must choose the proper role identity as frequently as the social context changes."
(Plotnicov, 1967, p.7)

Barth's description of the utilities model of society demonstrates this new freedom attributed to man -

"The most simple and general model available to us is one of an aggregate of people exercising choice while influenced by certain constraints and cultures."
(Barth, 1966, p.1)

Network analysis is often concerned to explain why people choose between various alternative courses of action.

b)

Interaction

Many disciplines now not only emphasise the relevance of actor-oriented study but also give interaction between individuals a definitive role in the creation of social systems.

Easton, a political scientist, has defined a political system as

"those interactions through which values are authoritatively allocated for a society." (1968)

Luckman and Berger say

"social order exists only as a product of human activity,

No other ontological status may be ascribed to it without hopelessly obfuscating its empirical manifestations."

(p.70, 1967)

Buckley and others have insisted that interaction is the basic element of social life.

"Though it is part of conventional wisdom to start with the individual and his "act", an interactional field is the real starting point."

(p.100, 1967)

"it is on this level of the purposes and decisions of complexes of interrelated and interacting individuals and groups - that current research and theory is developing the important modern theories of tension, 'role - strain', exchange or bargaining and the like, (although it is not thereby necessary to reduce analysis to a framework of radical methodological individualism as some have argued)."

(p.76, Buckley, 1967)

The focus of interest is quite definitely now interaction rather than individuals and actions. The network concept is really one method which is closely related to this subtle but crucial shift in interest.

"it is not norms and individuals socialized to them, which are the starting point of a fruitful theory of social systems, but instead, collective actions and rational actors, each with interests and power relative to those actions."

(J.S.Coleman, p.167, 1964)

c)

Generation of Social Forms and Transactions

Generative models are developed particularly in the work of Frederik Barth.*

* Ideas of generation of social forms can be traced back in the works of Boas and Simmel particularly "if anthropology desires to establish the laws governing the growth of culture it must not confine itself to comparing the results of growth alone, but wherever feasible it must compare the processes of growth."

(Boas, 1940, p.280)

In Models of Social Organisation (1966) he points out that only in transactions is it possible for values to be observed

"Transactional behaviour takes place with reference to a set of values which serve as generalised incentives and constraints on choice, it also takes place with reference to a pre-established matrix of statuses, seen as a distribution of values or positions in the form of minimal clusters of jurally binding rights. From this point, through the formation of status sets and the implications and restrictions of transactional relations and impression management within these sets I propose to generate gross forms of social behaviour which correspond to empirically observable patterns."

(1966, p.5)

Barth uses a model of utilities to provide the framework of his exposition.

"This general viewpoint shifts our attention from innovation to institutionalization as the crucial element of change. And if you have a system of allocations going - as you always must have where you speak of change - it will be the rates and kinds of payoffs of alternative allocations within that system that determine whether they will be adopted, that is institutionalized. The main constraints will thus be found in the system, not in the range of ideas for innovation, and these constraints are effective in the phase of institutionalization. Most of the salient constraints in the course of change will be social and interactional, not simply cognitive."

(1968, p.668)

Generative aspects of social interaction are central to other exchange theories. Homans has said that

"Probably there is no institution which was not in its germ elementary social behaviour."

Blau has devoted most of his book "Exchange and Power in Social Life" (1964) to a discussion of the ways in which leaders and opposition groups emerge and gain power and authority in terms of the basic elements of exchange and transaction. Systems theory, as it has been elaborated by Buckley, also provides a similar analysis of the creation

of social forms.

Luckmann and Berger have written a stimulating study, "The Social Construction of Reality" (1967). The major thesis of this work is that social forms are in fact generated on two distinct levels. At the level of practicalities people interact in terms of norms, values and institutions which thus receive expression through such interaction. The process is one firstly of habituation.

"Any action that is repeated frequently becomes cast into a pattern which can then be reproduced with an economy of effort and which, ipso facto, is apprehended by its performer as that pattern. Habituation further implies that the action in question may be performed again in the future in the same manner and with the same economical effort.... Habituation carries with it the important psychological gain that choices are narrowed."
(p. 71, 1967)

The second step is institutionalization which

"occurs whenever there is a reciprocal typification of habituated actions by types of actors."

Institutionalization is therefore a process which originates in social interaction.

On another level - that of ideas - institutions exist in our perceptions and typifications. Social structure becomes, as Luckmann and Berger have said, the sum total of these typifications.

The belief that culture is a system of typifications which are generated in social interaction is becoming increasingly important in social science.

"It will help us to understand religious behaviour if we can treat natural forms, like speech forms, as transmitters of culture, which are generated in society,

and which by their sanctions and emphasis, exercise a constraining effect on social behaviour."

(Mary Douglas, (1970, p.21)

Such a world-view or philosophy provides interesting insights into social life, particularly the mechanisms of social change. In the context of the structural/functional paradigm's supposed inability to cope with social change, generative theories have become particularly stimulating to anthropologists.

As a result of this focus of interest studies of micropolitics and other aspects of social life that might have once been regarded as trivial (as Bailey remarked in his 1970 Lectures) are commonplace at present. Turner sees a concern with process as causing a distinct change in British anthropology. He says that "Schism and Continuity" (1957)

"emerges clearly as a transitional book between the prevalent structural functionalism of British anthropology in the 1940's... and the processual analysis of the 1960's."

For Turner, at least, the difference between the old and new paradigms lies in the emphasis upon process and generation placed by the new paradigm.

d) Meaning and Communication ⁱⁿ ~~and~~ Culture

Garfinkel's concern in ethnomethodology is the location of a "secularised" collective conscience which reveals itself in interaction. In much recent social science the meaning given by individuals to their interactions is regarded as all important. The interest in the actor's viewpoint, and the generation of social forms, with a consequent emphasis on transience, coincide here.

Buckley relates meaning and interaction in the following way -
 meaning is

"generated during the total transaction and ceases to
 exist when the transaction is terminated."
 (p.64,1967)

Communication and information theories thus become of enormous
 relevance.

Blau -

"all social relations and transactions involve
 communication."
 (1964,p. 7)

Shibutani -

"culture is a product of communication."
 (p.162 , 1962)

Cultural areas come to be defined in terms of communication
 and the problem of defining units of study for social science
 is answered in a totally new way in the new paradigm in terms
 of interaction and communication.

"... society exists in and through communication,
 common perspectives - common cultures - emerge
 through participation in common communication
 channels; culture areas are coterminous with
 communication channels since communication net-
 works are no longer coterminous with territorial
 boundaries, culture areas overlap and have lost
 their territorial bases."

(p.164-5, Shibutani, in
 Manis and Meltzer)

Ultimately, for Mary Douglas, culture and society are
 interaction

"Society or culture are both abstractions, categories
 applied to the process which in the last resort
 consists of individuals dealing with other individuals."
 (Mary Douglas, 1970, p.157)

In these terms

"To talk about the priority of "society" to the indiv-
 idual is to indulge in nonsensical metaphysics. But

to say that some pre-existent association of human beings is prior to every particular human being who is born into the world is to mention a commonplace."

(Dewey, in Manis and Meltzer ed., 1961, p.149-50).

The existence of culture, which enables people to predict the likely outcomes of their behaviour is the only sense in which

"society is more than a collection of individuals. It is a collection of individuals with a culture, which has been learned by symbolic communication from other individuals back through time, so that the members can gauge their behaviour to each other and to the society as a whole...Using the perspective of symbolic interactionism, social action is lodged in acting individuals, who fit their respective lines of action to one another through a process of interpretation; group action is the collective action of such individuals."

(Blumer, in Rose Ed, 1962, p.186)

The logical conclusion of such a view is that

"A complete view of society would also be a complete view of all the individuals, and vice versa. There would be no difference between them."

(Cooley, in Manis and Meltzer ed. p.154-5, 1967)

The importance of individual decisions and the resultant interaction patterns is accepted by many disciplines other than anthropology. It is in fact a part of our current background assumptions or culture, to accept that the individual is not merely a cipher with little or no control over his environment. This notion directs attention to many new areas of interest, some of which I shall mention, and also requires a new concept of man to replace the passive being of structural/functionalism, and the rather foolish controllable creature which the behaviourists present. As the critical faculties of the individual actor are recognised and accorded the importance they deserve, the analyst himself becomes of increasing importance.

Jack B. Douglas has pointed out that ultimately all knowledge of the world is based upon some person's commonsense understanding of everyday life. In this respect the individual's understanding is of overwhelming importance, and accordingly becomes central to any social analysis. The observer's existential position also becomes crucial to the analysis - as Maquet and others have pointed out.

The recognition of this involvement of the observer with the observed brings social science back to the problem of solipism.

"In his [Husserl's] remark about "free variations" .. we envisage a sudden hope that a means of transferring in conceptual space (such that I might see my 'here' (hic) from the position of the others 'there' (illic) and vice versa) is being opened up for us. But Husserl takes away with his left hand what he offers with his right. We can indeed, by "free variation" of hic and illic in conceptual space, come to realise that the angle of incidence upon the world is informatively different each time we carry out the "free variations", but he points out that, even then, I shall only see from the other man's point of view what I would have seen from the same place. I shall never know what he saw, for he is an enigma, and unknowable constituting subjectivity whose perspectives on the world I have no means of knowing, however long I try."

(Poole, p.136, 1972)

e) Intersubjectivity

A closely related assumption to the acceptance of the validity of each person's perspective is the essentially subjective nature of all social information. In fact, the recognition of this is logically prior to assuming the validity of taking the acting units point of view in an attempt to understand social life. As

such it is an important element in the approaches I have already outlined.

Denzin has located the essential similarity of symbolic interactionism and ethnomethodology in these terms -

"A commitment to this (the attempt to describe the perspective of those being studied) principle permits the researcher to escape the fallacy of objectivism which is the substitution of the scientists perspective for those studied."
(p.926 , 1971)

In a similar vein Blumer has written

"To try to catch the interpretative process by remaining aloof as a so-called 'objective' observer and to refuse to take the role of the acting unit is to risk the worst kind of subjectivism - the objective observer is likely to fill in the process of interpretation with his own surmises in place of catching the process as it occurs in the experience of the observer."
(Blumer, p.188, Rose ed.)

The crux of analyses carried out by adherents to these new currents in sociology is the emphasis upon interpretation and meaning -

"no significant scientific description, analysis or explanation is possible without some fundamental consideration of these social meanings."
(Douglas, 1972 , p.ix)

Again the ability of man to control his social environment is apparent.

..."nothing can be attempted than to establish the beginning and the direction of an infinitely long road. The pretension of any systematic and definitive completeness would be, at least, a self-illusion. Perfection can here be obtained by the individual student only in the subjective sense that he communicates all that he has been able to see."

(Georg Simmel)

"Regarding subjectivity, I may say that all knowledge is subjective in one sense, in the sense, namely that it is mental, not the external thing, but a construct of the mind.... I am a behaviourist as far as I think I can be without being a fanatic. But we must not forget, as behaviourists sometimes appear to do, that the symbol is nothing in itself, but only a convenient means of developing, imparting and recording a meaning, and that meanings are a product of the mental-social complex and known only to us through consciousness. Reliance upon symbols, therefore, in no way releases us from the difficulty arising from the immeasurable nature of our elementary social perceptions. We can record behaviour and handle the record by statistics, but I see no way of avoiding the ultimate question, what does it mean?

(Cooley, pp. 74-5, Manis & Meltzer Ed.)

It is this fundamental question that has been overlooked in much social science which bases its concept of objectivity upon that supposedly existing in 'hard' science - that the observer is outside the area observed, influences it in no way, and that the study could be replicated with the same results by any competent scientist. This concept is already under fire in the 'hard' science where it is recognized that, for instance, it is impossible to know both the position and the impetus of a particle. It is patently irrelevant in the social sciences. Poole has said that he thinks it is impossible to have an objective relationship to anything at all (p. 95, 1972) and has illustrated his argument with sections of Chomsky's book on Vietnam and American involvement.

"It is perhaps not surprising that Chomsky should end up with a position not very far from Husserl's remark that "One must finally achieve the insight that no objective science, no matter how exact, explains or ever can explain anything in a serious sense." Chomsky himself writes in a similar spirit: "The social and behavioural studies should be seriously studied not only for their intrinsic interest, but so that the student can be made aware of exactly how little they have to say about the problems of man and society that really matter." (1972, pp. 105-6)

The modality of facts and their variation according to the perspective taken is becoming a commonplace. The problem then becomes, what is the use of attempting to express oneself to others, and, if there is any point to it, † how is it to be done?

"The fundamental goal of "objectivity" of knowledge is to make knowledge more useful. And the fundamental criterion, both commonsensical and scientific, by which this usefulness of knowledge is judged... is the shareability of knowledge"... "The greater shareability of scientific knowledge is achieved primarily by progressively freeing the knowledge of concrete phenomena from the situation in which they are known,... this freeing is done not by making the knowledge objectlike or thinglike but by so examining the situation in which we do the knowing that we are able to (partially) specify the ways in which another observer would go about constructing the same kind of situation."
(Douglas, 1971, pp.27 & 28)

The way to make knowledge more shareable is to attempt to explain one's own standpoint.

"Very few writers are subjectively dishonest. The real question is thus not honesty, or dishonesty, but what is the code of honesty of this specific writer i.e. his bias?"
(Myrdal, 1965, p.14)

"The objective scientist is not he who relies on pure method in his research, but he who points to the possibly biasing influences of theory and value at every step in his research operations."
(Rose, in Gross ed)

The recognition of the importance of subjectivity is thus, not a matter for despair, but can be turned to advantage, rather than ignored in the hope that it will go away. One solution is to examine one's own values and background assumptions, and to attempt to empathise with the observed people enough to understand their perspective and substitute it for one's own.

There are, however, other ways in which social studies can be pursued without being continually short circuited by their own subjectivity. Schutz has said that man will have to relate to practicalities, ultimately, and that this will provide a reference point around which knowledge will be oriented. Chomsky's concern with moral problems is in the same vein

"If American intellectuals will be preoccupied with such questions as these, they can have invaluable civilising influence on society and on the schools. If, as is more likely, they regard them with disdain as mere sentimental nonsense, then our children will have to look elsewhere for enlightenment."
(1970, p.254)

Harris has reached the same conclusion.

"Thus, the question with which we began, "How can I know that I am right?" is more easily reformulated as "What purposes shall I pursue?" The reformulation indicates the fault in the argument about the relativity of all judgements. All judgements are relative, and there is no alternative to their being so, for what is wrong is the simple notion of a judgement absolutely true at all times and places. We do have rules, but they are rather rules of thumb, guide lines, than absolute obligations wherever we are."

(p.225, 1971)

Already in anthropology there is an increasing interest in applied anthropology - Manners and Kaplan have suggested (1971) that this is a major reorientation of the discipline. I would agree, and suggest that one of the problems in network analyses has been the lack of a problem whose investigation is the aim of the study.

A further disadvantage of many studies lies in their unwillingness to utilise to the full the fieldworker's subjective experience.

f) The Observer's Existential Position

Anthropological and sociological studies have varied enormously in the amount of attention given to the fieldworker. W. F. Whyte in 'Street Corner Society' (1943) provides an analysis in which the observer is presented as a crucial element of the description of events. In the Appendix to later editions he explains how he became interested in particular topics, and also how he was able to follow up areas of interest. In this way he enables the reader to understand his position and this makes his analysis very interesting.

The increased interest in books such as those of Carlos Castaneda (1970) in which the analyst presents his own experiences as the raw material of his study, is evidence of the fact that the problems of the observer's bias and interaction with the observed is receiving increasing attention.

Elizabeth Bott was very aware of the importance of the interviewer's relationship with the couples being interviewed.

"Thus when Bott noted down after a first interview 'They remind me of people at the University of Chicago', the aim in supervision was to find out what they had done that had produced this feeling. In this case they had talked easily and brightly about their emotional 'problems' in an intellectual way. This did not mean that Bott's judgement of them was correct, her feelings was one datum among many. No attempt was made to rid the fieldworker of her attitudes towards the University of Chicago. That was for her to worry about if she wanted to. The point was to use her feelings as a source of information. And no attempt was made to rid her of her feelings towards the couple; that too was her concern. But it was hoped that if the fieldworkers understood what they felt they could avoid some of the pitfalls that can arise from acting on

feelings without knowing what one is doing."

(Bott, 1971, p. 43-4)

In recognising this interaction of fieldworker and the people observed the problem of subjectivity is sound in the way in which I suggested earlier. As Bott says, it is impossible to pretend that the fieldworkers were objective in that they were not emotionally involved in the situation, but it is possible to use and understand these emotions.

All men are endowed with abilities to respond emotionally to one another. The recognition of this shared facet of both observer and observed leads to a redefinition of man.

g)

Models of Man

"The question remains whether human society or social action can be successfully analysed by schemes which refuse to recognise human beings as they are, namely as persons constructing individual and collective action through an interpretation of the situations which confront them."

(Blumer, in Rose Ed., p. 192)

The development of a more complex model of man than that implied by exchange theory has been continuing for some time. To return to Goffman's work again - it is based upon two principles.

"1. People have the power of monitoring their performances, not only as to the end to be achieved but also to the style in which those performances are carried out, and thus the adoptions of style are conscious ... It follows that if a person can be induced to stand back from his actions - then he is in a position to discern the reasons, plans and rules or conventions, the deliberate following of which constitutes social action. This is to treat life something like a play - what I would call the "dramaturgical stand point".

"2. Much social behaviour is not spontaneous reaction to external events ("controlling variables") but is highly formal. Even those interactions which, at first sight, might seem spontaneous, turn out to have a formal structure when examined from the dramaturgical stand point."

(Harré, p.582, 1971)

These principles draw attention to the fact that man is in control of his actions and thus can influence his life's course. (The analogy with the reorientation of linguistics and the shift to a concern with syntax and semantics is again relevant here). Harré has suggested that a new view of man has already gained tacit acceptance as a part of the reaction against scientific positions which I have already alluded to.

"What is called the 'ethogenic' way seeks to replace the positivist point of view with a more realistic and authentic model from the established sciences, paying due regard to theory, and emphasising explanation. It seeks to replace the simpler models of people with the revolutionary concept of the anthropomorphic model of man, in which social scientists are recommended to treat people for scientific purposes as if they were human beings.

The ethogenic way can, therefore, be characterised by two slogans - 'Take care of the explanations and the predictions will look after themselves' and 'Assume that people are human beings'."

(p.582, 1971)

Harré traces this new anthropomorphic model in the writings of Strawson and Hampshire. The same concept seems to me to be present in Luckman and Berger's model of social construction of reality, in symbolic interactionism and ethnomethodology.

"The human being is not swept along as a neutral and indifferent unit by the operation of a system. As an organism capable of self-interaction he forges his actions out of a process of definition involving choice, appraisal, and decision. Cultural norms, status positions and role relationships are only frameworks inside of which that process of formative transaction goes on."

(Blumer, cited in Buckley, 1967)

Our conception of sociology ..

"does imply that sociology takes its place in the company of the sciences that deal with man as man, that is in that specific sense a humanistic discipline."

(Luckman and Berger, p.211, 1967)

In ethnomethodology, and phenomenological or existentialist sociologies the observer is assumed to be relying upon his own understanding of a situation, which he attempts to make available to others. In this way the intelligence of the observer is not taken to be of a different order from that of those he observes. The fact that the social scientist is human also necessitates that he also be described by the model of man adopted. Modern social scientists are claiming for themselves and the people they observe considerably more faculties than did the behaviourists or structural/functionalists.

This view of man does not eliminate the problems and subtleties of man as a self-controlled, thinking being, as does the view of man proposed by Exchange or ethology - when human beings are viewed as in the grip of a culture programmed by their instincts. It allows man more freedom and subtlety. It thus instantly brings the social scientist back to problems of solipcism and subjectivity. It also focuses interest upon communication, symbols, socialization and the generation of social forms. The whole series of ideas which I have discussed are inextricably intertwined in such a model of man and to attempt to accept and utilise one element while ignoring other parts of the new paradigm is doomed to failure. In anthropology interests in cognitive anthropology and ethno-

science are part of a movement which recognises man's intelligence and his power.

Barth has recently written that

"Human acts are predominantly shaped by cognition and purpose, asserted through awareness and voluntary behaviour i.e. through decision and choice."
(p.209,1972)

This represents a substantial move away from his more utilitarian theoretical stance of the past. Network analysis does not seem to have been related fully yet to the totality of these new sciences and in this respect it fails.

Boissevain has said that

"Network analysis is thus first of all an attempt to reintroduce the concept of man as an interacting social being capable of manipulating others as well as being manipulated by them."

To this extent man's power has been recognised in network studies. However, the problems of interpretation and perception do not as yet seem to have been approached. These are central to the new paradigm and it is because they have been ignored that network analysis has fallen rather flat, particularly since it still clings to the idea of the atomorphic man.

h) Reality and Social Structure

"Sociologists are increasingly becoming traders in definitions: they hawk their definitions of reality around to whoever will buy them."

(S. Cohen, p.24, 1971)

The ethnogenic view of man credits him with the negotiation of definitions of situations in interaction, and beyond that with the generation of social forms. Coupled with the acceptance of the ultimate subjectivity of perception, as it relates to needs and experience - this means that concepts of reality have been redefined.

The blurring of the distinction between normal and pathological which occurs in Laing's existential-phenomenological psychology is an aspect of this which has gained wide acceptance. In a narrower sphere, the recognition that a rapidly changing - for instance urbanizing - society is not necessarily one which is disintegrating, is a result of the view that reality is a relative concept, and that viewed from the individual's point of view such a society is functioning adequately. As Swartz has said - no one state can be said to be more normal than any other. This fundamentally undermines any attempt at sampling - since any situation or individual is unique and cannot be substituted for any other.

A re-examination of concepts such as deviance has had to follow. Labelling theory and other new theories of deviance are concerned with the meaning of behaviour. As Matza has

said, the aim is to 'appreciate' the deviant's own story. A consequent interest in the process of becoming deviant follows.

"Deviant values are not altogether discontinuous with more accepted ones: the deviant might only be taking conventional values to extremes or acting out - as David Matza has argued - private values which are subterranean to society. The deviant might justify his behaviour by appealing to widely acceptable social motives. 'I did it for fun' or 'everyone else is doing it'."

(S.Cohen, 1971, p.21)

As the individual is seen to have more control over his 'reality', problems such as the boundaries between groups become pronounced. Current theories of ethnicity recognise that ethnic status can be deliberately changed in many cases by individuals who see advantage accruing to them by such a realignment. Areas of social life which once seemed immutable become matters of choice and manipulation.

The ultimate subjectivity of any view of reality has been a problem which has puzzled many authors.

Harris, for instance, has said that much of his book "Beliefs in Society" is concerned to express

"doubts as to whether we can separate two compartments, 'reality' and 'ideology'. For our reality is the next man's ideology and vice versa."

(p.10, 1971)

Luckman and Berger have written extensively on the notion of reality, which they define as

"a quality appertaining to phenomena that we recognise as having a being independent of our own volition, (we cannot wish them away)."

(p.13, 1967)

If one takes the view propounded by Luckman and Berger that social structure and social reality are a compound of the individual perceptions of a situation, to investigate these perceptions would seem to be the only logical way to attempt an analysis or description or explanation.

"The social reality of everyday life is thus apprehended in a continuum of typifications, which are progressively anonymous as they are removed from the 'here and now' of the face to face situation. At one pole of the continuum are those others with whom I frequently and intensively interact in face to face situations - my inner circle as it were. At the other pole are highly anonymous abstractions which by their very nature can never be available in face to face interaction."

"Social structure is the sum total of these typifications and of the recurrent patterns of interaction established by means of them. As such social structure is an essential element of the reality of everyday life."

(Luckman and Berger, p.478, 1967)

Social structure is thus seen to consist here of ideas - typifications - and actual behaviour. The former aspect has been neglected by network analysts who are concerned with morphology (e.g. Barnes) to the huge detriment of the concept.

Taking such a viewpoint as that outlined above, the social anthropologist then has to involve himself in the task of abstracting from the "relevance structures" (Luckman and Berger, page 59) of the individuals with whom he interacts in the alien culture, the "social stock of knowledge" which will reveal to him the symbolic environment in which members of the society exist.

"What is personally real to men is real, frequently though not always, primarily not because it is unique to them - in the sense of idiosyncratic to,

or uniquely different for, them - but rather is socially and collectively true. Since the sense of the reality of things often depends upon mutual agreement or consensual validation, collectively held notions of reality are among the most firmly constituted components of the individual's personal reality. Yet the personally real does not entirely consist of or derive from collective definitions of social reality. It may also emerge from recurrent personal experience, whether unique to the person or shared with a few others."

(Gouldner, p.45, 1969)

In fact, there are two ways in which reality depends for its form upon man. His perception of it depends upon many factors, some personal and idiosyncratic. Beyond this, however, his interaction, based upon perceptions, does actually create the social reality of the world.

Philip Mayer's network analysis of East London demonstrated this clearly. He concludes that network form is a result of deliberate choices made within a particular moral framework. In its turn the type of network a man exists within influences his world view and reinforces him in his choices. Interaction is only pleasant with people who share enough beliefs and opinions to provide this reinforcement.

Similarly, Bott's idea of class as a reference group is based upon the central tenet that the 'reality' which exists for any individual is mediated for him by the social environment of his network.

In contrast, Gluckman says

"We do not merely analyze the set of ideas of the people involved in an institution. These indigenous ideas as formulations about what social reality is believed to be by its participants,

are some of the factors which are taken account of in our analysis. The actors' ideas, like their behaviour, are part of and influenced by the total reality in which they live. This reality... is something external and constraining. It is hard and cannot be changed merely by changing the set of ideas."

(Gluckman, 1968, p.232)

In fact, the small part of reality which is not determined by the interpretation man puts upon it, is by definition, of little interest to social science. Gluckman is presenting a view of reality which is alien to that of the new paradigm.

In the new paradigm reality becomes

"the resultant of the behaviour of many actors separately shaping their own acts according to their subjective view of the opportunities offered by their world and their society."

(Barth, 1966)

The complexities of the interplay of these factors in the creation of reality is immense.

..."I want to say that I am afraid I do not exactly know what reality is, and my only comfort in this unpleasant situation is that I share my ignorance with the greatest philosophers of all time.

... It is a misunderstanding of the essential character of science to think that it deals with reality if we consider as the pattern of reality the world of daily life. The world of both the natural and the social scientist is neither more nor less real than the world of thought in general can be. It is not the world within which we act and within which we are born and die. But it is the real home of those important events and achievements which humanity at all times calls culture."

(Schutz, in Emmet & McIntyre,
1971, p.113)

In spite of these problems of the definition and location of reality

"We attain a peculiar form of cultural achievement in keeping our pictures of objectivity roughly similar. Aberration is, beyond a certain point, visibly such.

Yet before that barrier between the acceptable and the simply eccentric is crossed, there is a vast hinterland of imprecision."

(Poole, p.110, 1972)

We manage to maintain roughly similar concepts of reality by interacting and checking our versions of reality with those held by other people. Communication is of the essence.

The line between normal and pathological realities seems to have become blurred, like that between normal and pathological social systems, as the relevance of the individual's perceptions has been recognised, with a resultant tolerance of views which do not resemble our own. Madness has, in the case of schizophrenia, become a problem to define precisely.

i) Madness

I have pointed out the concepts which have been redefined in the new paradigm of anthropology. In psychiatry networks have also become relevant as madness has been reappraised.

The emphasis upon the social network as a communication system (laid notably by Bott, Mayer, Epstein, Katz and other social anthropologists) has prompted psychotherapists to consider its possible effects upon individuals who are defined by society as deviant in some way. The importance of associates and friends upon the individual's behaviour and the beliefs he holds in such spheres as drug taking has been analysed (as has

the effect of being socialised into a particular religious group). Laing has had tremendous influence in the sphere of treatment of mental illness.

A.W.Clark has written, for instance...

"While the locus of the physiological conflict is within the person, its source is in the network of social relationships in which the person is embedded."

The inconsistent demands made upon the individual by the different areas of the social network may lead not only to role conflict but eventually to behaviour which is so abnormal and incomprehensible to others as to be designated mad. The family as a closely interacting unit is seen to be particularly insidious since here

"family members systematically invalidate the thinking, reality testing and self-concept of people who become psychiatric patients."

(Clark, 1969, p.92)

In a similar vein Hammer has written (1963)...

"At the cultural level, an individual is 'mentally ill' when his behaviour ceases to have the kind of predictability which is necessary for incorporation into the structure of social units in which he holds positions. All social interaction rests to some degree upon the classification of the participants in terms of their positions in a social structure."¹

For anthropology, madness defined in this way should help

¹ Hammer (1963) studied 88 Negro and Jewish New York patients and found that their referral related to :

- (a) distance of relationship - directedness and number of fields involved.
- (b) degree of network interconnectedness.
- (c) narrowness of the definition of behaviour relevant to the interaction.

to reveal the limits of variation of behaviour tolerated by a particular culture and should therefore be a revealing topic of study.

Within the culture group the individual's actual social network is of crucial importance in that it is possible to accommodate different degrees of aberrant behaviour within networks of varying flexibility.

The logical outcome of Laing's approach to madness is the idea of network therapy which has been elaborated on and experimented with, by Speck particularly, with reference to schizophrenia.

"We believe that significant pathology is present in the kinship system of the schizophrenic, in their friends and in their neighbours. We believe that 'madness' is basically a failure in communication and that 'mad' modes of communication are maintained in the entire system around the labelled 'schizophrenic person' and his family. We begin with the hypothesis that the social network of the schizophrenic family is the main mediator between madness in the culture and madness in the nuclear labelled family. Our goals are to increase the communication within the social network and in particular between individual members of the schizophrenic family and their kin, friends and neighbours."

(Page 183, 1969)

This particular approach directly owes its inspiration to E. Bott who is a trained psychoanalyst as well as a social anthropologist, and similarities between this approach and that of anthropology have been pointed out by Wheakland.

..."That is as anthropologists have long explained strange native beliefs and actions by relating these to their sociocultural contexts, so psychiatrists increasingly are reviewing much 'mental illness' not as merely individual pathology, but rather as behaviour that is

^{ably}
 understandably related to characteristic patterns
 of interaction in the individual's social system -
 especially the family."

(Wheakland, 1969, p.582)

Such an approach has developed through the use of group psycho-
 therapy which is becoming a more common treatment method.

"Attention in the past has been focused on illness
 as a function of the individual personality, but
 all illness (mental and 'physical') and every
 disturbance involves social relationships."

(Foulkes and Antony, p.288)

There are various types of group therapy, all of which base
 their treatment upon the idea that there is an enormous
 variation in the meaning which can be given to all but the
 'hard core' of common ground in communication within a social
 group - such as the naming of a chair as a chair rather than a
 horse. (Foulkes and Antony, page 252). Beyond this hard core
 "there are as many part-truths as there are observers."
 (Foulkes and Antony, page 255). Each view point is as valid
 as each other in the group therapy situation - an idea which
 immediately reminds one of the anthropologist's aim of respecting
 each society with its particular culture however exotic it may
 appear. The aim is to understand the particular viewpoint of
 the individual, and to do this the level of "Complete
 communication" has to be reached.

"Communication is everything happening in this
 particular group situation which can be noticed,
 it is everything sent out and received with
 response, either consciously or unconsciously."

(Foulkes and Antony, page 259,
 1967)

Network therapy specifically involves the social network

in terms of persons significant to the schizophrenic family - in these group discussions the aim is to strengthen bonds and loosen binds in analytic terms.

I wanted to discuss this particular, somewhat peripheral concept of network therapy, in order to emphasise that the definition of a situation and the behaviour of the participants in interaction relates enormously to the particular situation in which they find themselves in terms of the social structure. A limiting case - madness - seems to me to provide enormous scope for cross-cultural investigation and comparison. Also I hope I have shown that psychologists are increasingly considering a wider social environment and that, as Lewin suggested in Field Theory, the individual and the social situation are very closely interrelated and delicately balanced. To consider in detail the individual's reaction to a particular situation through network analysis can be of great value to social anthropology in that the subtle distinctions of the situation put forward by different actors may well expose complex disparities in their social positions, rather than purely psychological and individual idiosyncratic factors.

To return to the idea of social network as used by social anthropologists rather than analysts, it is clear that the level of the psyche can be taken as given.

As Foulkes and Antony pointed out there is only a hard core of reality which even intimately interacting members of the same culture can assume will be agreed on. Once this is established,

the anthropologist, particularly in a large scale society, is left with what appears to be an incomprehensible, unstructured mass of people who share very little in terms of their belief systems and symbolic environment, and yet the particular view of a situation which each individual concerned in it has, can yield enormous information about the social system and the ideas - norms, etc. - which underly it. The idea that people of a different social class view the same society in enormously different ways is one of the most considered aspects of this - since it is so apparent and also so politically explosive. The more subtle effects of social position on perception are less readily available for study and yet are more potentially revealing.

V. OBJECTIONS TO NETWORK ANALYSES

1. Introduction

The criticisms I make here of network analysis are not intended to apply to all the studies using the concept of network. It will be apparent which studies are at fault in which particular areas.

I regard network analysis as a method for the presentation and analysis of data. As such it can be used in many different contexts and with many different orientations. My main criticisms stem from its use in conjunction with ideas which are not a part of the new paradigm in anthropology. However, it is not inevitable that the method should be used in this way, and so the criticisms I make are not in any way meant as outright condemnations of the method. I want to point out ways in which networks have been used less successfully than they might, and to suggest the reasons for this occurrence.

2. Objectivity

I have, I hope, demonstrated that one of the motives which encourage the use of network analysis is the desire to produce an unbiased description and analysis of social life. Unbiased here refers to the notion of objectivity which is imputed to be a part of the 'hard' paradigm. The observer's role is obscured and a pretence is kept up that he does not enter into or impinge upon the social activity that he observes in any way. This is the major failing of such studies, although it is compounded by the fact that the theories with which it has been allied are not in themselves satisfactory.

The influence of the individual's emotions and personality upon his work has long been recognised.

"This fieldwork is an extremely personal, traumatic kind of experience, and the personal involvement of the anthropologist in his work is reflected in what he produces." (Leach, 1959, p.27)

The solution to the problem has been less clearly seen. Leach, whose remark I quoted above, exhorts the anthropologist to "stick to the facts of the case, and exercise your imagination, but don't get so personally involved in the situation that you cannot distinguish between the empirical facts and your private analytical concepts." (Leach, 1959, p.1.)

Such a suggestion begs all the relevant questions. Maquet has written an extremely lucid article devoted to this topic and has put forward ideas which allow the anthropologist to overcome the problem of his subjectivity. He draws on Mannheim's concept of 'perspectives' upon social phenomena (which relates to Husserl's phenomenology - see below).

"It is the fact that the anthropologist perceives the social phenomena he studies not from nowhere but from a certain point of view, which is his existential position. To define adequately an anthropological study, it is not enough to indicate its object e.g. 'the social structure of the Mundang' one should add 'as seen by an anthropologist belonging to the socioeconomic middle stratum of the white colonial minority.'"

As Maquet points out,

"This addition is not just one more welcome instance of precision, comparable, for example to details on the interviewing techniques used. In the most acute manner it raises the question of the scientific nature of anthropology. If the anthropologist's perspective has to be mentioned, it means that the observer's subjectivity is taken into account. And is not subjectivity just what science eliminates? To be scientific, should not an assertion be verifiable by any scientist? And how can an anthropologist verify what another has written about a certain society if the description or analysis is determined not only by the object (the society studied) but by the subject (the anthropologist) as well?"

This problem has been raised in its most acute form by the extraordinarily different descriptions of Tepoztlan, produced by Redfield and Lewis (see Pelto, 1970, pp. 31-35).

Maquet recognises what Pelto chooses to ignore - namely 'subjectivity in observation.' The 'evident theory impregnation of ethnographic data' is as Jarvie points out, rarely confronted.

"... if political predilections, aesthetic learnings and value biases were to determine the truth or falsity of anthropological explanations - or what constitutes 'good' or 'bad' anthropology - the potential of anthropological knowledge for contributing to either explanation or application would be seriously undermined." (Manners and Kaplan, 1971, p.31)

Unfortunately, the inevitable subjectivity of the anthropologist's perception of the world means that his judgements must be based upon exactly those concepts which Manners ^{and} Kaplan abhor. The question of whether this need invalidate such work is not so simply answered however.

In fact, I would agree with Pocock that unless the subjective nature of all anthropological work is recognised, it is invalidated.

"Without some idea that society determines thought and action, the object of study ceases to exist. But if this notion is coupled with the idea of objectivity borrowed from natural science, sociology destroys itself for finally the observations of the sociologist himself are influenced not only by his national society, but even by his class and intellectual milieu". (Pocock, 1961, p.113)

Manners and Kaplan approach a solution to the problem when they remark that:

"... the mistake made by critics is that they have tried to locate objectivity where it never existed - namely in the minds of individual anthropologists. We agree that all anthropologists, like all people, are biassed. If anthropology is to claim any objectivity whatsoever, then, that objectivity can only emerge from the collective work of anthropologists - involving the interplay of many different biases over time." (Manners and Kaplan, 1971, p.29)

Maquet reaches approximately the same conclusion:

"Several perspectival views of the same social phenomenon help to describe more precisely each view point and consequently to determine how each of them affects the resulting knowledge I.. More is to be expected from the confrontation of a multiplicity of perspectives than from the quest for the 'best one' ... it is from the comparison of different, existentially conditioned views, and not by the futile attempt to cleanse one's view of any social commitment, that more complete knowledge of the object will be obtained." (1964, p.54)

The major potential of network analysis lies in a possibility of presenting the unique perspective of each actor on his own existential position and reality. To an extent exchange theory implies this sort of approach, but by refusing to accept that the observer's position is also crucial and requires elaboration, the subtlety and potentialities have been missed in all the studies I have considered, with the exception of Bott, Whitten and Parkin's work.

Van Velsen has remarked that "for the sociologist interested in social processes there are no right or wrong views, only differing views representing different interest groups, status, personality and so forth."

It is in the task of obtaining these different views that network analysis can be of use.

There is another way in which the observer's subjectivity can be counteracted to some extent.

"Values do enter anthropological research at many points, whether or not this is recognised. They enter into the selection of problems, the choice of variables, and thus the interpretation of data. I suggest that an anthropologist who is explicit about his own values is likely to frame his problems more sharply and to see more clearly the lines between values and data more than one who has not examined his data." (Gough, 1968, p.14.)

This self examination relates back to Maquet's desire to have the existential position of the observer specified in each study on the assumption that the reader will then be aware of the type of bias present. It also relates to the Reflexive Sociology which is argued for by Gouldner. How effective it can be is arguable. It is rather like the graph of an infinite regression which approaches but never touches its axis - i.e. zero, or the problem of the hare and the tortoise.

As long as a notion of objectivity is adhered to, which is supposedly derived from the 'hard' sciences, no method will provide satisfactory analyses. Unfortunately, network analysis seems to have been linked extensively with such a concept.

a) Empiricism

Such an idea of objectivity as has just been outlined is part of an extreme doctrine of empiricism. Experience is opposed to theory in such a schema which, ultimately, accepts only the reality of the former and rejects the existence of any supersensory reality.

Gellner has said that the commonly accepted formulation of empiricism is "the doctrine that whilst theory is essential and desirable, it ultimately depends for its validity on observation and experiment."

(Dictionary of the Social Sciences, 1964.) In these terms network analysis has been used empirically in almost all cases. Writers have used it to elaborate theories such as exchange theories (Kapferer, 1969-1972) or to test hypotheses - such as that the form of the social network and the conjugal role relationship are interlinked.

(Noble 1970, Turner 1967.)

Used in a pejorative sense, empiricism denotes "a doctrine which asserts or recommends the absence of theory altogether" (Gellner, in Gould ed., Dictionary of the Social Sciences, 1964)

The idea of objectivity towards which many of the network analysts are striving is a part of this type of empiricism.

Anthropology as a whole has been moving away from such a notion of empiricism at least since Levi-Strauss began to exert an influence over the discipline. According to Levi-Strauss, anthropology attempts to build models:

"The best model will always be that which is true, that is the simplest possible model, which, while being extracted exclusively from the facts under consideration, also makes it possible to account for them" (1953, p.526)

In attempting, as Mitchell argues we should, to make networks as close to empirical reality as possible, the advances made in anthropology in recent decades are completely ignored. A narrow empiricism of this sort is unlikely to provide stimulus to the disciplines development.

Furthermore it is not necessary to try to be as close to reality as possible to be objective. As Durkheim said objectivity is achieved by the distancing of individual facts (page 44, Rules of Sociological Method). In Schutz's terms this is making knowledge transsituational. Such a process is actually hindered by the type of empiricism which has been associated with some network analysis.

b) Terminological Refinements

It is apparent (see Chapter III) that a standard network methodology is the aim of many of the writers who use the concept of network. The aim is to produce a method which could rival that of the experiment of the 'hard' sciences. The articles by Mitchell (1969), Wolf (1970) and Barnes (1970 a) explicitly seek such a method.

In order for such a development to occur it is essential that a concise and precisely defined terminology for networks and related concepts be formulated. Harries-Jones (1969) and Boissevain (1972) have both written articles in which they urge that the term 'quasi-group' be dropped since the concept it refers to is, in fact, classificatory rather than an interactive quasi-group (Boissevain, 1972, p469). Boissevain suggests that the term coalition be utilised and taken to include the concept of the interactive quasi-group to which A.C. Mayer refers (1966). Mayer (1972) has replied that he agrees with Boissevain's reformulation and asks him to consider a wider re-evaluation of terminology.

The discussion of the term 'quasi-group' has apparently eliminated some confusion and may well make the use of the network concept more fruitful. It is debatable, however, how true this is of other terminological debates.

The distinction between star and zone made by Barnes (1968), for instance, seems to be an overabstract formulation. The elimination of a particular set of links purely because they are between ego's first order contacts is unlikely to provide any useful insights.

Arbitrary decisions, such as to consider first order contacts only, are bound to produce distorted information. Such terminological refinements are, in fact, rarely if ever applied. The fact that they are suggested at all is a side effect of a search for a standard methodology to give network analysis and anthropology a scientific status.

In fact, probably one of the strengths of the network concept at present is its flexibility. The relative novelty of the concept enables people to use it in ways particularly appropriate to each topic they examine without having to fit their data into a set of rigidly defined terms. Elizabeth Bott (1971) is quite right when she says that we should use the concept without worrying about apparent terminological confusion.

The notion of the group was never defined finally and immutably. For instance, in the Encyclopaedia of the Social Sciences it is defined in three different ways by three different writers.***

In the Encyclopaedia of the Social Sciences (1968) Homans (vol. 6 p.258) defines the group as "a number of persons; or members, each of whom while the group is meeting, interacts with every other, or is able to do so, or can at least take personal cognizance of every other". Deutsch (p. 625) writes that a group consists of two or more persons who 1) have one or more characteristics in common 2) perceive themselves as forming a distinguishable entity 3) are aware of the interdependence of some of their goals or interests 4) interact with one another in pursuit of their independent goals" He adds that 5) they may endure over a time and therefore 6) develop norms and 7) sets of roles and rights. Sherif and Sherif (p.276) say the group is "a social unit consisting of a number of individuals who stand in status and role relationships to one another that are stabilised in some degree at a given time and who possess a set of values or norms regulating their behaviour, at least in matters of consequence to the group."

In spite of this the group is a concept which is used by many sociologists and anthropologists who share a common understanding as to what it implies at least to the extent of enabling them to use the group concept productively. It is clear that a strictly defined terminology is not essential. In the analysis of field data, unless it is hoped to standardise methods. The desire to do this stems from an adherence to an outdated natural science ideal, which is one of the least attractive elements of some network analysis. In such a setting the insistence upon the primacy of one definition over all others is an aspect of academic jostling for prestige, particularly when it is done in a context unrelated to any field study. The aim does not seem to be to increase understanding but to demarcate specialisms for particular anthropologists.

3. The Failure of Quantification in Network Analysis

One of the areas in which network analysis was claimed to be particularly fruitful was that of the collection of systematised data which would be amenable to mathematical analysis. It is a sign of the methods failure to live up to its original promise that this has not yet occurred. Of the studies I have considered in detail, only eleven have involved the presentation of quantitative data (Boissevain, M.G. Smith, Oeser, (Gulliver), (Wheeldon), Harries Jones, Pons, Kapferer, Lamphere, Foster, Turner, Hallpike and Noble). For the most part this has involved merely the counting of heads. The exceptions being Boissevain's, Oeser's, Kapferer's Turner's and M.G. Smith's works. (Hallpike's more sophisticated analysis is based upon game theory and takes its units of analysis as an urban area rather than an individual. It thus poses different problems). Boissevain's work (1972) is more specifically oriented around network analysis than

any of the others. He concludes that social environment influences the gregariousness of any individual. To reach this conclusion he analyses in considerable detail the networks of two informants in Malta - one urban and one rural in origin.

I feel that, as P. Mayer remarked in his review of Kapferer's article in the Mitchell Symposium, "Interesting though the material seems to be, it is not really very revealing to be shown in terms of a single dispute that it is advantageous for the disputant to have firm links with many people, preferably influential ones." (Mayer, 1970, p.721)

Mayer, however, concludes that the solution to the problem is that "in principle very many networks ought to be analysed and related, with a view to isolating typical features or variations and discovering their implications before one attempts to explain social processes in network terms." (1970, p.271). In this he echoes the exhortation of Mitchell and Garbett for the collection of more systematic data, and intercalibration (Gutkind). The fault is seen to lie at the level of inadequate information. In fact, the failure of quantification in network analysis has far deeper roots.

"Nearly every sociological thesis proposes a new method which, however, its author is careful not to apply, so that sociology is the science with the greatest number of methods and least results."
(Poincare)

The proliferation of network terminology has been commented upon. At the level of method and qualification the same confusion persists. Barnes, Wolfe, Mitchell and Garbett have between them proposed five detailed

methods of using networks to collect quantitative data. A modified version of Mitchell's proposal has been applied perhaps twice in Kapferer's work.

The network analysts themselves point to some of the impracticalities.

Gulliver writes that Barnes:

"proposed means to measure degrees of density but I do not see how these would be applied to Ndendenli material (or for that matter to other concrete cases from real life)". (1971, p.246)

The density measures are too crude to be of any use, and any refining of the concept would make it relevant only for the problem at hand, and remove its justification - the provision of comparative data. Also any such refinement - which is essential if relationships are to be characterised meaningfully in the concepts of strandedness, contents and so on, instantly requires subjective categorisations by the observer.

"The perception of the strands in the relationship, however, depends upon the analytic purpose of the observer." (Mitchell, 1969, p.23)

Thus, the only merit of quantification - a certain type of objectivity which would allow direct comparisons to be made - is removed.

A concentration upon morphology and structure which is essential if quantifiable data is to be used also makes for tedious reading, as the writers are aware, and, in fact, teaches us little of the social processes involved.

"This long exposition of the formal properties of networks of social relations has not taken us very far along the road to the study of political process." (Barnes, 1968, p.122)

"Standards of literary elegance and eminent readability ... must often be eschewed in the interests of a more developed and incisive sociological analysis". (Gulliver, 1971, p.82)

"Heavy demands are indeed made by the reader by this kind of analysis, and I would merely comment that there is no reason why science should be easy reading." (Gluckman, 1967)

"... devoted most of the summer of 1968 to the mind deadening task of organising and collecting the network data..." (Boissevain, 1972, p.2)

The boredom induced in investigator and reader alike by network analyses of the type which insist on quantifying data is a result of the fact that only the most trivial and readily apparent conclusions can be drawn from a remarkably large amount of detail in this way.

The non-quantitative mathematical methods hailed by Mitchell do not seem to have materialised, and we are left with unsophisticated head counting. Even at this level the observer and his bias intrudes at every level, and it is the refusal to recognise this that results in the omission of all meaningful areas of social intercourse from such data. As Blau has said, there exists no measure of change content, and this is a substantive not a methodological fact.

"The interest here (Barnes, 1954) is in the morphological features of the network itself and their implications for social behaviour rather than in the flow of communications through the network." (Mitchell, 1969, p.5.)

Such an interest can only be justified by a concern to quantify and compare in hopes of eliciting social processes which are not readily apparent to the observer. However, the ignoring of communication means that the meaning of the interaction within the network is dispensed with.

The end result of all this is that as Boissevain says, "never has so much been written about so little." (1968, p.554)

The reason for so much being written is, surely, that networks are currently fashionable and, for many social scientists, seem to represent a panacea. The idea that data are somehow better for being mathematically processable is clearly still with us - though for the most part not explicitly so - and many people believe that if they can only understand and apply the complex methodology of networks, they will be represented with such data. Such a belief persists because the domain assumptions of society. The most important of these are the belief in prediction and control by external agencies through objective analysis of data on particular aspects of human life.

These assumptions are changing rapidly however, and as they do the emphasis upon objectivity, scientific method and quantification is unlikely to remain with us.

The basic failure of quantification is still due to the inescapable fact that "all of us know that the essential things in our own relation to other men are not subject to numerical measurement." (Cooley, in Manis and Meltzer, 1969, p.49)

a) Density Measures

Barnes has said that "although mathematics supplies concepts that are admirably clear and precise, the social scientist finds he has to deal with the same kind of terminological jungle as generally prevails in other areas of social science where there are fewer

pretensions to methodological rigour. In this instance, at least the jungle is purely terminological and not conceptual ..."(1970, p.216)

I hope to show that the jungle may be purely terminological at the level of mathematical concept but that it most certainly is conceptual when it comes to the applying of the mathematical concepts to social systems. The problem of quantification of social networks is not methodological, but substantive.

By illustrating in some detail the problems of arriving at a numerical value of density, I shall point out my objections to the quantification of network studies. If I was to discuss other more obscure measures such as span as well, I would be reiterating my objections, since they all stem from the problem of defining the social concepts - such as relationship - which are being measured. This process is so subjective that to attempt to compare the results of different workers in different situations would be completely impossible. A further objection to quantification is that the aim seems not so much to be that of making knowledge available to others, but of increasing its exclusivity. There is an air of mystification in all these calculations, which is unnecessary (except that if this were not so their ultimate irrelevance would be more easily seen).

Barnes has presented the different terms - such as connectedness, loose and close knit, large and small mesh - which have been applied

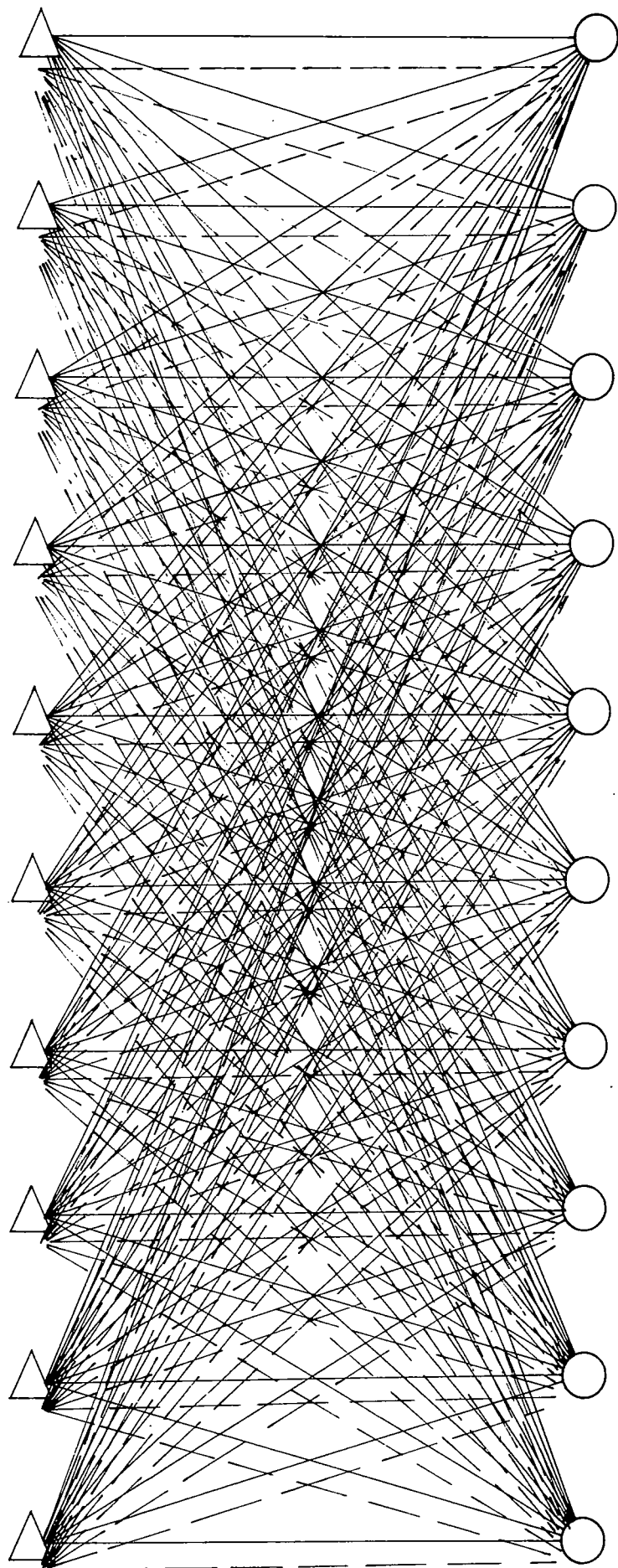
to networks and which are basically concerned with the density of the networks (1970, pp.224-228). Density is the number of lines present in the vicinity of a given point as a fraction of the maximum possible number (p.225, 1970).

Barnes first suggested the rise of such a measure in 1969. He suggests applying the measure to stars and zones - ego-centric abstracts from the network. As an example of the mystification I mentioned above I would cite the fact that he nowhere presents the means of calculating this measure. From his statement (p.63) that in a zone containing Alpha and six people potential number of links is 21, it is possible for the reader who knows some maths to conclude that the formula is $\frac{n(n-1)}{2}$ = potential no. of links where n is the total number of people in the zone. He then presents a table (p.63) in which he gives various measures for three hypothetical networks.

Society	Density Per Cent	
	1st Order Zone	2nd Order Zone
1. "Everyone knows everybody"	100	100
2. "No homosexuality"	18	53
3. "Proselytizing"	18	2

He explains briefly what each society is like (p.62-3). 1. is quite clear. 2. is a society in which each person knows only members of the opposite sex. 3. is a society in which each person converts ten others - the network always ramifies.

He presents no diagrams and in order to work out exactly what is meant in the case of society 2. it is necessary to work back from the densities given. He says (p.63) there are ten men and ten women



First order zone

Second order zone

**Fig.2 Barnes' society no.2
'No homosexuality'**

in the society. (There are ten people adjacent to each Alpha in the other societies - clearly this is irrelevant in the case of a society of type 1. whose density will always be 100%) In the primary zone of society 2. it becomes apparent that Alpha knows ten people of the opposite sex, none of whom know each other.

The potential linkage is $\frac{11 \cdot 10}{2} = 55$

The actual number of links is 10

Therefore, the density is $\frac{10 \cdot 100}{55} = \frac{200}{11} = 18.18$ (recurring)

(a simple percentage calculation is used here)

In the second order zone, each person of opposite sex to Alpha knows another ten people of Alpha's sex who do not know each other.

The potential linkage is $\frac{21 \cdot 20}{2} = 210$

The actual linkage is 110

Therefore, the density is $\frac{110 \cdot 10}{21} = \frac{1100}{21} = 52.6$ (correct to 1 decimal place)

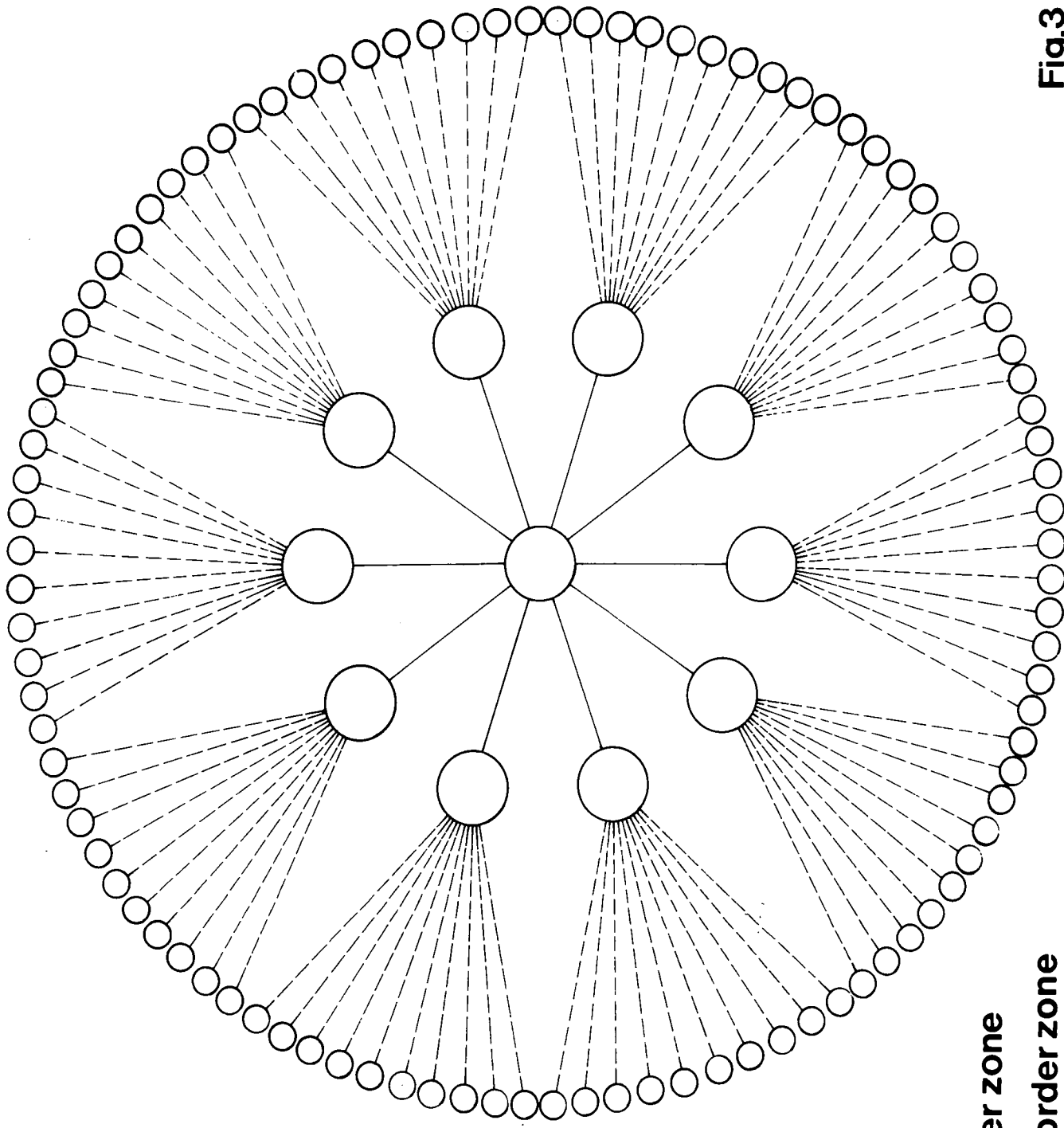
Society 3.

The first order zone contains Alpha and his 10 contacts

The potential linkage is $\frac{11 \cdot 10}{2} = 55$

The actual linkage is 10

The density is $\frac{10 \cdot 100}{55} = 18.18$ (recurring)



— First order zone

- - - Second order zone

Fig.3 Barnes' no.3
'Proselytizing'

Second Order Zone

Alpha and his ten contacts, their ten contacts

Potential linkage is $\frac{111.110}{2}$

Actual linkage is 110

Density is $\frac{2.100}{111} = \frac{200}{111} = 1.7$ (correct to one decimal place)

I have elaborated on these calculations because it is difficult to understand how Barnes has arrived at his figures in the text. He has ignored the elementary rule of mathematics which is to demonstrate every step by which one reaches an answer. The result is that he is not explaining anything but rather producing a set of authoritative working figures and of thin air. He does not even bother to explain that he has corrected his figures. (Also when he says that the measure of first order density does not discriminate between societies 2. and 3, he seems to be unaware of the fact that the first order zone is identical in these two societies.)

It seems that Barnes is not trying to teach other analysts how to use the formulae for density measurement at all, or he would write out his calculations properly. There seems, in fact, to be little or no value in the whole exercise as it is presented here. Barnes assigns measures of density to cliques and clusters. Density is the most important single measure used in network analysis.

Bruce Kapferer has attempted to apply this measure to empirical studies and it becomes apparent immediately that the major problem, once one has extricated the relatively simple formulae from Barnes'

obscurantism, lies in defining links for inclusion in such ^a calculations. (Kapferer uses a slightly different ^{formulae} from that of Barnes, density measure which excludes the primary star relationships), I have taken my discussion from Kapferer's (1972) book since although the calculations are identical with those in the (1969) article, I feel that it is fairer to criticise the fuller text.

Kapferer is attempting to elucidate the way in which support is mobilised by workers in a factory dispute. To this end he presents various network measures, of which I shall examine one - density.

The formula given is:
$$\left(\frac{2N_a}{N(N-1)} \right) 100$$

where N_a = the number of actual links, and N the total number of persons in the network (p.172)

"By density I simply refer to the extent to which the individuals to whom Ego is linked are linked to each other." (1972, p.172)

I suggest that this is not 'simply' defined at all. In examining the idea of link in Kapferer's work we are left with the notion of something distinctly hazy.

"By interaction I refer to continuous uninterrupted social activity involving the participation of at least two persons." (1972, p.163)

The components of interaction are sociational or instrumental transactions.

"I have attempted to overcome such difficulties (in the categorization of transactions) by categorising a trans-

action as sociational or instrumental on the basis of what I considered to be its dominant element, according to my general knowledge of the nature of the relationships between the individuals engaged in the interaction." (1972, p.164)

Kapferer is thus already introducing an element of personal judgement which would make his study unreplicable. He continues to explain that he is concerned only with voluntary interaction (p167) and not those interactions directly concerned with the production process. In this he is following Blau's limitations on the relevance of exchange theory.

Later he eliminates transactions that are not regular.

"By regular I refer to repeated transactional activity. That is transactional activity which I recorded between individuals which occurred more than once and from my data appeared as a relatively frequent aspect of their interaction." (p.168)

(In doing this he is concerning himself with 'normal' average behaviour only and omitting any aberration. He returns to the structural/functional outlook on social life, a view which is confirmed where he writes, "those relationships which are unilateral and imbalanced are relatively stable because of their unilaterality and imbalance", p. 203)

From these definitions the existence or not of a 'personal interactional relationship' between any pair of people seems to be extremely elusive, and is based upon Kapferer's discriminatory powers. It is assumed that this is valid, when in a cross-cultural study this is precisely what must not be taken for granted.

The whole basis of the measurements is so shaky - for instance:

"The factory premises were small enough for me to observe most of the interactions between the workers, though I by no means claim that all were recorded."(p.163)
that they are of very little value

Ultimately, the observer's judgement is of such enormous importance at every stage of the study that we are presented with a quantification of his ideas rather than anything derived from the society under examination. Induction dominates deduction to such an extent that quantification is merely a gloss, which obscures the overwhelming importance of the anthropologist's judgement.

4. The Limitations of Exchange Theory

I have already demonstrated that exchange theory is the tacit theory behind the majority of network analyses, and as such, if it fails, so do the studies concerned.

Exchange theory clearly derives much of its inspiration from the behaviourist psychologists Watson/Skinner. They have produced an elaborate theory of social behaviour based upon the notion of the neurological stimulus-response arc. Although it has been argued that such ideas are out of date, Koestler has quoted V. Bertalanffy (1967) who says that American positivist philosophy and psychology:

"have achieved the rare feat of being both extremely boring and frivolous in their unconcern with human issues."

He continues:

"I don't care a jot whether Professor A, B or C have modified Watson, Hull and Freud here and there and have replaced their blunt statements by more qualified and sophisticated circumlocutions. I do care a lot that the spirit is still all-pervading in our society; reducing man to the lower aspects of his animal nature, or a marionette of political power, systematically stultifying him by a perverse system of education, in short, dehumanising him even farther by means of a sophisticated

psychological technology.

It is the expressed or implicit contention that there is no essential difference between rat and man which makes American psychology so profoundly disturbing. When the intellectual elite, the thinkers and leaders, see nothing but an overgrown rat, then it is time to be alarmed."

Many network studies achieve the remarkable feat of being both boring and frivolous, and it seems that the cause is their reliance upon the empty theories of exchange.

Skinner indeed still exerts an enormous influence in psychology which, in turn, effects many other areas of social science. He argues that culture can be successfully designed so that the reinforcement of culturally desirable behaviour is successful. In this way dissent will be eliminated (Listener, September 1971). As an empiricist he contends that only observable activities, and thus measurable units of ^ebehaviour are of relevance, - mental events are excluded from consideration. In this he follows Watson:-

"The time has come when psychology must discard all reference to consciousness ... its sole task is the prediction and control of behaviour; and introspection can form no part of its method."
(1938)

The model of the natural sciences is to be strictly adhered to - although it is the mechanistic model of the nineteenth century.

Eysenck is a prominent behavioural psychologist who follows these ideas. Similarly, the vogue for kinesics at present is a part of the same view of man - a ratomorphic one, as Koestler has called it. The aim of such work is to control human beings and persuade them to conform to a particular code of behaviour which is imposed, hopefully not by despots as Skinner says, but from a hierarchy of some sort. Such ideas are clearly useful for political manipulation - Eysenck's ideas on the prediction of

criminal behaviour in certain of the population, for instance, have apparently been taken seriously by the American government. (Poole, 1971, p.60)

"Our problem, then, is behaviourism, which would permit not even description in 'subjective' terms. A few sociologists and anthropologists have fully accepted the tenets of behaviourism; many more make concessions to it. If the use of the term 'conditioning' is any evidence, almost the whole of modern anthropology has gone behaviourist!" (Nadel, 1951, p.57)

Behaviourism is still of enormous importance in social science:

"Yet the earlier claims of behaviourism to be all-embracing are only slightly toned down; for these basic mechanisms, it is held, will prove applicable to the fields of social psychology, moral behaviour, psychoanalysis, the theory of empirical knowledge, also to insight, thought and reasoning - in 'short, wherever in human or animal behaviour habits play a significant role'." (Nadel, 1957, p.59)

Nadel has demonstrated clearly the inadequacies of behaviourist psychology which he finally dismisses in these terms:

"Let me, in conclusion quote this 'confession of faith' of an outstanding psychologist: 'I believe that everything important in psychology (except perhaps such matters as the building of a super-ego, that is everything save such matters as involve society and words) can be investigated in essence through the continued experimental and theoretical analysis of the determiners of rat behaviour at a choice point in a maze'. (Tolman, 1938) As an anthropologist, who treats of society, I rest content!" (1957, p. 64)

The new form in which behaviourism appears is exchange theory. Blau and Homans have applied such ideas to produce a theory of society. Homan's discussion is particularly materialistic, and supportive of the status quo. Blau's concepts are more inclusive - he attempts to consider power, affection and other non-tangibles as essential parts of his analysis (intrinsic rewards to social interaction). Ultimately one is left with the feeling that one has been told in enormous detail things which one knew anyway, and in a particularly tedious way.

The notion of exchange becomes marginal to an understanding of social life, however, once it is recognised that values such as altruism influence behaviour. In that case transactions become of relevance only in so far as they can bring to our attention scales of value, as Barth points out. Even at this level, however, exchange theory is merely a revamped utilitarianism and all the objections to that theory must apply to it. It does not supersede older anthropological notions of reciprocity in any way.

Its only contribution is that it points to the importance of the actor's definition of values and so on and the importance of interaction and relativity. Thus, its general level of analysis and to some extent, its focus of interest are relevant, but overall its effect is more negative than positive. The alienated view of social interaction which it suggests fosters the production of the more tedious and pedantic network analyses even when the constriction of the natural science paradigm is escaped. A totally different view of man is required, and indeed exists, but has not yet been used by network analysts. Until this occurs, the network concept will not provide much inspiration to social anthropologists.

5. Conclusions

My major contention has been illustrated in the previous sections - it is that network analysis has suffered enormously from its alliance with an outdated paradigm. A further major disadvantage in most completed studies is ^{that} the assumptions underlying such a method have not been examined. If this were done its anomalous links with aspects of the structural/functionalist paradigm would be broken.

This basic oversight has led to the immense confusion over the exact role that network analysis has to play in social anthropology. Mitchell has stressed that it is to be seen as an element which can contribute to a structural analysis, and that by concentrating an analysis of the same behaviour but at different levels of abstraction the result can be either a discussion of networks or institutions (1969). The problem of levels of abstraction has exercised many later network analysts. In a recent article Mitchell (1972) has written that the concept of role can be related to that of network since roles emerge at the level of partial network abstraction. Beyond this one can separate out institutions - "a set of norms and values which relate to a phenomenologically distinct aspect of social relationships." He concludes that "networks of relationships are the starting point in the analysis of group behaviour and that they exist as analytical constructs which the observer erects partly by taking the participants perceptions into account and by fitting together observations not available to the participants themselves."

This admixture of emic and etic, objective and subjective, is what makes network analysis so unsatisfactory. Although I realise that ultimately we are all subjective, the major point of using network analysis seems to me to be the clear presentation of the processes and understandings involved in interaction. Mitchell considers in depth the problem of meaning in his later article (1972) He locates meaning at the level of expectations - but says that the analyst must move beyond the perceptions of the actors. To the extent that in order to understand what is to him a new situation he has to be aware of understandings which are for the actor unconscious, unless - as in the methods of ethnomethodology they are suddenly questioned, this is true. (The logic of studying a crisis situation - which is becoming increasingly important - is based

upon the same assumptions). Beyond that the idea of moving beyond the actor's understanding is based upon an application of a 'hard' science paradigm to the social sciences.

Boissevain in his 1968 article was concerned to emphasise that the ego-centred approach must supersede that of structural functionalism. Garbett has said he can find no way of reconciling the two. The reason is, as Banck has remarked, that one cannot, by definition, be interested in groups as well as networks. It is a strategic choice. Groups impinge inasmuch as this may influence behaviour, but ultimately one's focus is the individual and he provides the reference point. The level of abstraction depends upon the problem to be tackled, but once it is settled upon, it is not possible to move outside it. In fact, the network approach should allow the anthropologist to chart his own socialization into a new culture, and thus the ways in which he learns about, and perceives institutions will enter the study; but they are learnt about from individuals interaction and it is this element which is crucial and which is dismissed by suddenly shifting levels of abstraction. This renders unintelligible most network studies.

A closely related problem is a criticism which has been levelled at network analysis in the past. Basically, it is that a field-worker has to know the society before he starts work.

"Just how the fieldworker can discover who his informants are to be, or which of the situations are to be analysed, without prior knowledge, is not entirely clear. It seems that some sort of intuitive or empathetic knowledge of the context in which situations are analysed and ego-oriented, networks are defined is a prerequisite."
(Kushner, 1969, p.96)

"The fieldwork upon which the analysis is based is, of course, much deeper and more extensive than mere presence when the incidents constituting the situation took place. It involves a detailed knowledge of the ecological and institutional background of the participants as well as familiarity with the "history" of the participants ... but the explanation of the specific behaviour in the situation necessitated his (Boswell) tracing out and recording the characteristics of the relevant networks of the actors." (Mitchell, 1969, pp.32-3)

The editing out of the ways in which the anthropologist learns the background information as unfit for scientists' consumption, is pointless and makes the network studies vague and tedious. If the analyst is placed at the centre of the network and explains how he learns this information about a new culture the data is understandable and of real interest. In effect an anthropologist is faced ready-made with a happening - such as the ethnomethodologists attempt to create - or crisis as he enters the society. How will he be treated? How will he learn to function in this strange culture? From the answers to such questions as these the reader can be given real insight into the working of a culture he knows nothing about - it can be translated into his terms.

Whitten is the only network analyst I have seen to use this method, and even he does not present his final analysis in these terms. He tells how Gloria, his first informant in Nova Scotia, was in fact not accepted by the local inhabitants. Clearly this is of interest and relevance since her information will be biased and related to her position in the community. **

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Incidentally, Toffler quotes studies which have found the same phenomenon occurring when new families move into new areas. They are taken up by the local 'integrator', and when they realise that she is not integrated into the community herself, they drop her. Toffler remarks that fortunately by the time this happens there are usually new arrivals!

Network analysis suffers again here by refusing to accept the essentially haphazard nature of anthropological research which is inevitable, since each situation, individual and so on is unique. It is ^a substantive rather than methodological problem. This failure to accept and exploit to the full the advantages of network analysis can be overcome, and is the major problem in the methods used.

To an extent the other problems which I should like to mention follow from this.

"Moreover and distressingly from any point of view, there seems to have been an increasing use of 'network' in a vague, jargonistic sense. Students, and others have tended to use it as a loose substitute for the sometimes suspect terms 'structure' and 'system' without giving it substance or significance: indeed as a substitute for genuine analysis. There is danger, therefore, that the term, may degenerate into another meaningless cliché." (Gulliver, 1971, pp. 345-6)

The studies in which this seems to have happened are, in fact, those which I suspect Gulliver would see as least vague. Network has been used in a constructive way by writers such as Bott, P. Mayer, S.C. Mayer, and Whitten without having to be rigidly described within the dictates of 'hard' science paradigm. The flexibility of the concept is, after all, what distinguishes it from ideas of system and structure. If this is removed, jargon is all that is left.

The problems of tedious presentation which I have mentioned also derive from this type of approach.

"There seem to be tendencies today to assume that networks can be analysed and classified without reference to the cultural significance attached to people's own explicit or implicit notions of their social capital". (Whitten, 1970, p.272)

Meaning is removed as being too 'subjective' a concept.

Overall, these disadvantages can be overcome, and then network analysis will come into its own - as an important methodology within the new paradigm which I shall outline. What is required is not an attempt at reconciliation between the old and the new, but an enthusiastic exploitation of the new to the full, bearing in mind that that approach will eventually be superseded in its turn. As Kuhn has said, those who cannot adapt to new paradigms simply get left behind. This has happened already to network analysis, unnecessarily so. We must avoid becoming semi-scholars.

"My characters are semi-scholars in that they have each taken possession of a certain group of facts, they have a theory and they command a scientific method, or a number of such methods, but that they apply these beyond normal limits ...". "No one has dreamed of treating them as though they were mad.

The reason is that men of science have neglected to classify as a madness that deviation of the mind which consists in applying a method without moderation, without any intervention on the part of what is called mental control. The absence of this faculty of checking each assertion and each step forward is what differentiates the semi-scholar from the true scholar.

The latter sees a method as no more than an imperfect tool, though a perfectible one. The semi-scholar attributes to it the absolute and definite value of a magical key. Consequently, he applies it unhesitatingly to the entire range of facts falling into within his field of vision, and without classifying these facts according to their order of importance." (Van Gennep, 1967, pp. xxi - xxii)

In order to avoid this, it is essential that the network method be utilised within the framework of the new paradigm I have outlined.

It is apparent that the objections to the method stem, ultimately, from a failure to adopt this paradigm.

VI SOCIAL THEORIES AND SOCIAL FORMS

Since perception is altered by experience, it follows that experience of shared social forms is likely to result in similar perceptions. As all the network analysts I have cited come from Western Europe or North America it is reasonable to assume that they share common experiences which influence them in their choice of network analysis as a method.

"Social theory, then, changes in at least two ways and for two reasons. First it changes through 'internal' technical development and elaboration, in conformity with such distinctive rules of relevance and decision-making as it may have. Second, social theory may also change as a consequence of change in the infrastructure in which it is anchored: that is, as a consequence of changes in the social and cultural structure as these are mediated by changing sentiments, domain assumptions, and personal reality of the theorist and those around him." (Gouldner, 1971, p.397)

The acceptance of a particular social theory at a certain time also rests upon a similarity of perceptions shared by the innovator and his colleagues. The context of justification is as important as the context of discovery. Theories can get out of phase, as it were, and not be accepted for some time (if ever). Husserl, for instance, seems to be more in tune with our own background assumptions and infrastructure than he was with those of his own contemporaries. Kuhn has remarked that it frequently happens that new ideas may be introduced into a discipline by a relative outsider. This is understandable since he has not yet been immersed in the domain assumptions of the discipline and can see totally new problems and solutions. (Leach was such a person in anthropology which he entered from engineering).

However, the complexities inherent in the fact that "the social system is not something given in experience, but is rather an intellectual

construct or model", (Beattie in Manners and Kaplan 1968, p121) and is created by actors' and observers' perceptions means that reality and social theory are likely to be similar in many ways.

The social system which led to the rise of functionalism has been described by Gouldner (1971) and others. Maquet has related colonialism and a conservative functionalist anthropology.

"Although many exceptions could certainly be pointed out, it seems not unfair to say that during the colonial period, most anthropological studies were - unwillingly and unconsciously in many cases - conservative: first in that Africans were described as so different from 'civilised' peoples and so 'savage' just at the time that Europe needed to justify colonial expansions; and second, in that later on, the value of the traditional cultures was magnified when it was useful for the colonial powers to ally themselves with the more traditional forces against the progressive Africans. We do not believe that these parallels are mere coincidences." (Maquet, 1964, p.50).

As Gouldner says:

"every theory is thus a tacit theory of politics",
as well as a personal theory,

"inevitably expressing, coping and infused with the personal experience of the individuals who author it. Every social theory has both political and personal relevance, which, according to the technical canons of social theory, it is not supposed to have. Consequently, both the man and his politics are commonly screened out in what is deemed the proper presentation of presumably 'autonomous' social theory." (1971, p.40.)

It is in fact easier to disentangle the relationship between social theory and social structure at a temporal distance, but there seem to be some clear relationships at present.

Taking urban, Western society as the milieu of the majority of network analysts we can understand how their particular insights are related

to the society they inhabit, by considering some popular conceptions of the nature of modern society.

1. 'Modular Man'

Louis Wirth noted the fragmented nature of urban relationships.

"Characteristically urbanites meet one another in highly segmental roles ..." he wrote, "their dependence upon others is confined to a highly fractionalised aspect of the other's round of activity." Rather than becoming deeply involved with the total personality of every individual we meet, he explained, we necessarily maintain we are interested only in the efficiency of the shoe salesman in meeting our needs; we couldn't care less that his wife is an alcoholic.

What this means is that we form limited involvement relationships with most of the people around us. Consciously or not, we define our relationships with most people in functional terms so long as we do not become involved with the shoe salesman's problems at home, or his more general hopes, dreams and frustrations, he is, for us, fully interchangeable with any other salesman of equal competence. In effect, we have applied the modular principle to human relationships. We have created the disposable person - Modular Man.

"Rather than entangling ourselves with the whole man, we plug into a module of his personality. Each personality can be imagined as a unique configuration of thousands of such modules." (Toffler, 1970, pp. 87-8)

It would seem that we are already used to coping with ideas of partial networks and multiplex or uniplex relationships in our own society.

It is not surprising that ideas such as role and network have come to prominence in this social situation. The social structure we have created in interaction provides the model for such social theories.

The concept of role is already being displaced both in theory and our own society. In theory it is now seen as a formalised aspect of inter-relationships or is not mentioned at all. The idea of 'role-taking' is predominant. In society similarly, the role of, for instance, a woman is now greatly questioned. It has become possible for people to act out roles without being committed to them, and to reject many of the traditional trappings of a particular role.

It seems we are continually forced to test our own assumptions, and that as we do so, we question those of other societies and cultures. Many art forms now challenge our 'recipe-knowledge' of reality.

2. Change and Choice

The increased transience and impermanence of all aspects of life, which network analysis is particularly concerned to discuss, has emphasised relativity. Buckminster Fuller has said that "those who have lived in New York since the beginning of the century have literally experienced living with Einsteinian Relativity." This has made it essential that experience is judged only in its own terms. The alternative is to invalidate the experience of most people around oneself.

"Change, roaring through society, widens the gap between what we believe, and what really is, between the existing images and the reality they are supposed to reflect. When this gap is only moderate we can cope more or less rationally with change, we can react sanely to new conditions, we have a grip on reality. When this gap grows too wide, however, we find ourselves increasingly unable to cope, we respond inappropriately, we become ineffectual withdraw, or simply panic. At the final extreme we suffer psychosis - or even death." (Toffler, 1971, p.159-60)

The present concern in the social sciences with the nature of reality, and the sudden realisation that reality is created through interaction can thus be explained. We experience this ourselves. It is no longer possible to assume that the signs and symbols which were accepted yesterday have the same meaning today. It is observable that they are frequently renegotiated and established. The vexed question of men's hair length is a case in point. It is no longer possible to assume that long hair is associated with a particular life-style. Short hair is equally fashionable and far more indicators have to be used before it is possible to type a person. A more flexible system of signalling exists and is not so amenable to quick judgements by outsiders. It is possible to mix elements from different life-styles, and the whole idea of being able to make assumptions on the basis of appearance has become a matter for negotiation between actors.

We also create and control our own images, which we wish to project. The important elements in society have become life-styles (which fit in with an ideology of equal opportunity). In a real way, these are created by individuals rather than being the impositions of a hard external reality, as class was.

"Thus today it is not so much one's class base as one's ties with a sub-cult that determine the individual's style of life. The working class hippie and the hippie who dropped out of Eton share a common life style but no common class," (Toffler, 1970, p271)

The knowledge of what constitutes a part of a particular life style is picked up by intuition. It is impossible to describe many life-styles since they change so quickly that by the time it is written down the whole description is irrelevant. This is the problem with books about skinheads, suedeheads, rockers, etc. etc., which have proliferated recently.

The fears of the past - that we were racing towards cultural homogeneity - are proving unfounded. The abundance of sub-cults which flourish all over the Western world disproves this finally.

Toffler has argued that choosing a sub-cult gives respite from the problems of over-choice which we all face. Again, the fact that we do have to cope with more choice today than was the case in the past is reflected in the importance given to the individual's manipulation of situations which is an essential part of the new paradigm.

"What they [sub-cults] offer is not simply a skin show, or a new soap, or detergent, they offer not a product but a super-product. It is true they hold out the promise of human warmth, companionship, respect, a sense of community. But so do the advertisers of deodorant, and beer. The 'miracle ingredient' the exclusive component, the one thing the sub-cults offer that other hawkers cannot, is a respite from the strain of over-choice. They offer not a single product or idea, but a way of organising all products and ideas, not a single commodity but a whole style, a set of guidelines that help the individual reduce the increasing complexity of choice to manageable proportions."
(1970, p.275)

The interest in languages, such as Welsh and Irish, which have been declining in importance but are now undergoing a resurgence is an aspect of this. Black Power and other movements provide further examples.

In anthropology, there has recently been an increasing interest in ethnicity. The emphasis has been particularly upon how a particular ethnic status can be linked with a particular ecological or political niche. This again is to be explained in terms of the experience of anthropologists in their own society, as well as that which they are studying.

Identification with a particular life style is now the "super-decision²" which each person has to take. The decision is made in terms of the relative advantages which accrue to the individual from membership of particular groups. The process of decision making and choice is, therefore, of particular relevance to us now. Areas of study - such as operational research - have grown up specifically devoted to social choice.

"The more socially accepted life-style models put forth by the society, the closer that society approaches a condition in which, in fact, each man does his own unique, thing," (Toffler, 1970, p.282)

In order to cope with this diversity it is essential that society becomes more tolerant, and aware. There is an increasing interest in anthropology - for instance, 'O'- and 'A'-level courses for schools are being

devised, as the need to understand cultures or sub-cultures different from our own becomes more pressing.

Alienation produced a particular type of social science:

"... sociology emerged as a 'natural' science when certain domain assumptions and sentiments became prevalent; when men felt alienated from a society that they thought they had made but could not control. Whereas European men had once expressed their estrangement from themselves in terms of traditional religion and metaphysics, they now began to do so through academic social science, and scientism became, in this way, a modern substitute for a decaying, traditional religion.

The concepts of society and culture, which are at the very foundation of the academic social sciences, are in part based upon a reaction to an historical defeat: Man's failure to possess the social world that he created. To that extent, the academic social sciences are the social sciences of an alienated age and alienated man. From this standpoint the possibility of 'objectivity', by the social sciences has a rather different meaning from that conventionally assigned. The 'objectivity' of the social sciences is not the expression of a detached and dispassionate view of the social world; it is rather, an ambivalent effort to accommodate to alienation and to express mutual resentment of it." (Gouldner, 1971, p.53.)

"The 'reality' offered is said to be an unseen but underlying condition, the 'real' basis of surface chatter. The 'reality' is a substitute for certainties eroded by time and circumstance. The fading of a common framework of assumptions about how we should live and what we should pursue has been described by many commentators on the appearance of modern industrial society." (Harris, 1971, p.20)

The invalidation of individuals who question the political order in terms such as Harris describes, is a continuing process. Under the new paradigm, however, reality becomes at once both more and less accessible. Ultimately all we know is derived from our own or someone else's perceptions - and we have, therefore, to accept at face value what people say they experience. Debunking theories are on the way out, and with them behaviourism.

"This simplified doctrine of the conditioned reflex does everything it can to annihilate its enemies ... for the theory according to which man is only the creation of his environment is comfortable for everyone - the citizen who has been 'equalised' in this way is welcome both to American capitalism which hopes for a citizen without surprises ... if ... one observes the mental and emotional resistance which the behaviourists have for everything that is not conditioned reflex, one finds, I think, in the background the ideology of all the current political doctrines ... Any man who wishes to manage the big masses automatically adheres to the equalising doctrine of the all powerful conditioned reflex." (Lorenz, June 1970, l'Express.)

3. Institutional Collapse and Innovation

As ideas of objectivity, and whole value systems are questioned, there are reactions throughout society.

"In such conditions (when old assumptions become not merely invalid but meaningless) of malaise, then, morality, religion and philosophy become matters of doubt. Politics reflects the confusion of men's direction. Sense and nonsense become difficult to distinguish, the catalogue is jumbled. Confusion prompts men to seek new guides, to examine the old, and in the process of examining past beliefs they become aware of the social and personal roots of their beliefs, the historical relativity of opinion and knowledge, the existence of, 'ideologies' in what had formerly been commonsense or 'reality', The most closely integrated into the old ideology are the least self aware, the least able to see the ideology as a relative response to a particular range of problems. Weber remarks that major innovations in existing belief systems tend to arise not in the major centres of a cultural system but on its periphery, for 'the possibility of questioning the meaning of the world presupposes the capacity to be astonished about the course of events'" (1952, p.206) (Harris, 1971, p.21)

Innovators in social forms are also to be seen as external to the social system in some way. Artists have always been recognised to be marginal men. Entrepreneurs have been since studied as such. A degree of detachment and lack of integration is essential for the development of creativity.

The demise of the old reification^{**} of social structure also relates directly to changes in our own social environment:

"The historical and empirical application of the sociology of knowledge must take special note of the social circumstances that favour de-reification - such as the overall collapse of institutional orders, the contact between previously segregated societies, and the important phenomenon of social marginality." (Luckman and Berger, 1967, p.109)

It would seem that these are the circumstances which are bringing about (and are brought about by ?) the emphasis upon the individual.

Similarly, G. Homan^s says that elementary social behaviour appears when institutions have broken down, or in the gaps left between institutions. It also 'clings to institutions as to a trellis'.

"Institutionalisation makes more complex the chains of transactions between men but it achieves it at the prices of simplifying one link. Elementary social behaviour may compensate for this simplification." (1961, p.204)

It is precisely in situations in which institutions have supposedly collapsed or in those areas of social life that remain outside particular institutions, that network analysis has demarcated its specific spheres of interest and competency.

Mary Douglas has related social and symbolic orders, and in her terms we seem to be going through a stage of effervescence. (1970, p.74)

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"Reification can be described as an extreme step in the process of objectivation, whereby the objectivated world loses its comprehensibility as a human enterprise and becomes fixated as a non-human, non-humanisable inert factivity." (Luckman and Berger, 1967, p.106)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. lack of articulation in social structure, weak control on individuals by social grid and group 2. Little distinction recognised between interpersonal and public patterns of relations 3. Society not differentiated from self | <ol style="list-style-type: none"> 1. Diffuse symbols 2. Preference for spontaneous expression, no interest in ritual differentiation; no interest in symbolic expressions of inside/outside. 3. Control of consciousness not exalted. |
|---|---|

The evidence of this ^{is}~~as~~ all around us. Hallucinogens are of enormous popularity and there exists a "cult of informality" (as Leach, 1965, has called it). The individual's position as the only tangible in all this flux means that understanding has to be centred upon him to have any permanence.

Pocock has described the cargo cult situation in terms which make it appear remarkably similar to that existing for us now.

"In Cassirer's terms, the balance between conservation and innovation was destroyed in favour of the latter. The social forms of communication appear inadequate. The society is as near atomization into its component individual's as it could be. The last resort is a new stress upon the individual as that society concretes it, an emphasis upon history, upon individual possession by spirits, upon the individual inspired leader." (Pocock, 1961, p.112)

The importance accorded to sub-cult leaders at present is an example of such a need for charismatic individuals. In the pop world this is most obvious - the Beatles have long been superseded by stars such as Marc Bolan and David Bowie who experience an astonishingly short period of enormous popularity, and are at the centre of a very definite sub-cult for that period. In other parts of social life this frenetic

element also appears. Gurus come and go. Previn and others in music find it de rigeur to copy the pop mode and call concerts 'gigs'. Actors emerge as politicians. Writers such McLuhan, Marcuse, Buckley and Leary become cult heroes. The whole emphasis is upon the hero - the individual. It matters less and less what he does, as long as he provides a figure to indentify with.

A similar analogy to that of the cargo cult has been drawn by Leach, who said that although the Millennium is not at hand, the Reformation is well under way.

4. Subjectivism

In so far as it seems that 'objectivity' is unlikely to continue to influence the social sciences or any other area of intellectual study, it would seem that we are becoming less alienated from our social system. The flowering of ^aactivist and protest groups everywhere bears witness to the increasing belief in the individual's efficacy in changing his own life and influencing areas which had previously seemed out of his hands. This again is expressed in new social theories, and must alter the whole fabric of society. We seem to have passed through the passive phenomenon of the beat generation.

"The beatnik is neither reactionary or revolutionary; he is simply the anarchist in waiting, existing society is a sham, a 'shuck', his reaction to it is a kind of passive resistance. He 'opts out', he ~~plays~~ it cool, he disaffiliates." (Powell, 1967, p.366)

Powell, in describing the social circumstances which gave rise to the 'beat' generation refers to Mannheim. In his terms, both ideologies - rationalising and conservative - and utopias - revolutionary ideas - have vanished leaving a situation of anomie.

"Mannheim clearly foresaw the consequences of such a condition - a dehumanisation of the arts, an emergence of a 'matter of factness' in all spheres of cultural life, an ethic of 'genuineness' and 'frankness' replacing more heroic ideals. Deprived of meaningful participation in the social system, the mind or self loses its structure and direction, sinking into a kind of torpor which requires even more violent stimulation to arouse it. Reason itself is held in abeyance and the pursuit of long-range goals is abandoned for the pleasures - and the anguish - of the moment."
(1967, p.366)

The similarities between the 1920's, 1950's and the 1970's are remarkable. In the 1920's "The subjective and interpersonal took precedence over the institutional, a mood reflected not only in the arts but in the great growth of psychiatry and psychoanalysis." (1967, p.363^{***})

Subjectivity seems to be in vogue again today. Gouldner insists upon a reflexive sociology and many other writers are turning away from the concept of objectivity.

Toffler sees this as a sign of weakness:

"The assertion that the world has 'gone crazy'; the graffiti slogans that 'reality is the crutch', the interest in hallucinogenic drugs, the enthusiasm for astrology and the occult, the search for truth in sensation, ecstasy and 'peak experience', the swing toward extreme subjectivism, the attacks on science, the snowballing belief that reason has failed man, reflect the everyday experience of masses of ordinary people who find they can no longer cope rationally with change." (Toffler, 1970, p.325)

At present there is a reversion to the pop music and fashions of the 50's. It remains to be seen if this is a part of a shift back in other spheres as well.

The swing toward subjectivism' which Toffler describes is apparent in many aspects of society today. **

In the arts and philosophy subjectivity is a major element in many movements at present. Existentialism ultimately gives pride of place to subjective interpretations of the world. The Theatre of the Absurd also denigrates society and presents the individual and his understandings as the only comprehensible elements around us. The work of Samuel Beckett also expresses alienation from a wider society.

On July 7th, One Pair of Eyes (on BBC 2) gave Tom Stoppard a chance to air his views. He is obsessed with the idea that we can know nothing with any certainty. When he investigated the weights and measures office it seemed that he was right - it is not even possible to have a length which is quite definitely a metre, there is always uncertainty. A.J. Ayer was quoted as saying that there is ultimately the possibility to be considered that we can know nothing at all. Stoppard dismissed theories of biochemical factors as underlying the creative process by

** For instance some recent book reviews reiterate the fact that positivism has been rejected and a swing towards subjectivity has begun: "I share with him [David Holbrook] a dismay at the insidious diffusion of inhumane attitudes of denial, hate and perversion at all levels of our culture.

Holbrook sees this process as being accelerated by our reflex veneration for objective science and technology which is then applied to inward human experience which it is positively unequipped to understand. The result has been a violation of integrity, an inversion of values and a vitiating relativism which has invaded every aspect of our cultural beings." (Review of 'Sex and Dehumanisation' and the 'Masks of Hate', Gabriel Pearson, Guardian, June 22nd, 1972.)

"The kind of psychology which Mr. Hudson now advocates is one, as he says, in which the contents of the mind matter. To put it crudely, such a psychology is clearly anti-behaviourist: it is likely also to avoid that attempt to appear scientific which characterised the early days of experimental psychology in Cambridge and later, in Oxford." Mary Warnock. Review of "the Cult of the Fact". (Liam Hudson, The Listener, 6th July, 1972.)

saying that the likelihood of such a chain of reactions - from amino-acids to writing - was so small that, in his view, the odds were shorter on god.

Interest in body language (which is expected to occur if it has not already, to judge by the sudden appearance of several paperbacks on the subject) is a part of the same trend. It involves a rejection of language and with it reason. Today (July 8th, 1972) in the Times appears the following:

"Great excitement at the Institute of Contemporary Arts over a new programme, "The Body as a Medium of Expression" ... 'One of the suppositions that we've working on is that our society has developed language too much. We would say that language is only one way of communicating; that verbal culture is part of the over-specialisation of industrial man', says Jonothan Benthall, the ICA's controller and moving spirit behind the enterprise + 'our emphasis on language - logo centrlicity as Derrida called it - means that we have neglected, and repressed, the expressive resources of the body."

One of the parts of the exhibition, which includes distortions of the body, body painting, tatooing, trichology, cosmetic plastic surgery, padded underwear, false teeth and a hall of mirrors - is an orchestra, playing silently to emphasise the movement of the players.

Paradoxically, objective (in the terms of the 'hard science' paradigm) science when applied to social life eliminates meanings in the same way that watching an orchestra play silently eliminates meaning in the arts.

I have used Roger Poole's book 'Toward Deep Subjectivity' extensively in my thesis and to illustrate how widespread this subjective trend is I would like to quote from George Steiner's review of the book in the Sunday Times:

"If he is not careful, Dr. Poole will find himself the object of a cult among the young and the subterranean. His awkwardly-entitled essay falls squarely into the current movement of anti-rationalism, inter-personal encounters, R.D. Laing and 'Soul'. "Time is growing short" and the world will destroy itself if it does not abandon the lunacies of so-called logic, of competitive power relations and unbridled science. The choice is nothing less than that between the 'life-world' of complete ethical values, of genuine contact between human perceptions on the one hand, and the destructive follies of war and technological automatism on the other".

Boissevain has suggested that our social theories are based on a vision of what society should be like, rather than what it is like.

"Emancipation, revolution and the questioning of the right of those who wield established power to exact obedience are themes which are dominant in the societies in which network analysts live and work. We must make sure that our theorising and analysis are based on fact and not merely wishful thinking."(1972)

The fact seems to be that we see society as out of control, due to the failure of our planning methods, and respond with an inward turning subjectivity which has already influenced the arts, philosophy and social theory as well as the social relationships which we contract.

"One response to loss of control, for example is a revulsion against intelligence. Science first gave man a sense of mastery over his environment, and hence over the future. By making the future seem malleable, instead of inimitable, it shattered the opiate religions that preached passivity and mysticism. Today, mounting evidence that society is out of control, leads to disillusionment with science. In consequence, we witness a garish revival of mysticism. Suddenly astrology is the rage. Zen, yoga, seances, and witchcraft become popular pastimes. Cults form around the search for Dionysian experience, for non-verbal and supposedly non-linear experience. We are told it is more important to 'feel' than to 'think' as though there were a contradiction between the two. Existentialist oracles join Catholic mystics, Jungian psychoanalysts, and Hindu gurus in exalting the mystical and emotional against the scientific and rational

This reversion to pre-scientific attitudes is accompanied not surprisingly by a tremendous wave of nostalgia in the society. Antique Furniture, posters from a bygone era, games based on the remembrance of last year's trivia, the revival of Art Nouveau, the spread of Edwardian styles, the rediscovery of such faded pop-cult celebrities as Humphrey Bogart or W.C. Fields, all mirror a psychological

lust for the simpler, less turbulent past. Powerful fad machines spring into action to capitalise on this hunger. The nostalgia business becomes a thriving interest."
 (Toffler, 1970, pp.398-9)

The popularity of '50's style music and dress at present (July 1972) has led to the opening up of cafés such as the Hard Rock and Smalls; a resurgence of interest in the music of the 50's - Elvis, Rick Nelson and others - is apparent.

The increased interest in anthropology is a part of a search for some alternative, more peaceful life-style. It gains popular expression in the sales of 'ethnic' clothing and so on, which are increasing enormously. In London it is possible to buy clothes made by peasants from all over the world. It is also an expression of a genuine interest in and tolerance of other people which must go with some types of subjectivity.

"The failure of technocratic planning and the consequent sense of lost control also feeds the philosophy of 'now-ness'. Songs and advertisements all hail the appearance of the 'now generation', and learned psychiatrists, discoursing on the presumed dangers of repression, warn us not to defer our gratifications. Acting out and a search for immediate pay-off are encouraged. 'We're more oriented to the present,' says a teenage girl to a reporter after the mammoth Woodstock rock festival. 'It's like do what you want to do now ... If you stay anywhere very long you get into a planning thing ... So you just move on.' Spontaneity, the personal equivalent of planlessness, is elevated into a cardinal psychological virtue.

All this has its political analogy in the emergence of a strange coalition of right wingers and new leftists in support of what can only be termed a 'hang loose' approach to the future. Thus,

we hear in seminars calls for anti-planning or non-planning, sometimes euphemised as 'organic growth'. Not only is it regarded as unnecessary or unwise to make long-range plans for the future of the institution or society they wish to overturn, it is sometimes even regarded as poor task to plan the next hour and a half of a meeting. Planlessness is glorified." (Toffler 1970, p.399)**

Anthropology and the other social sciences are inevitably swept along in these currents which permeate the societies of Britain and America.

5. Conclusions

Network analysis is a response to changes, not only in the societies anthropologists seek to analyse, or in the theories of social anthropology, but also in our own social experience. Aspects of our lives which have become problematic - such as the enormous range of choice we are faced with in every sphere, the speed of change, and the resulting questioning of views of reality - become particularly interesting to us. These problem areas have become the focus of interest of much anthropological work, and network analysis provides a methodological advance in the study of these new problems.

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Again, anthropology is gaining adherents as it provides a reason for otherwise aimless travel. Travel is valued by our society for its own sake, - in this we differ enormously from other societies - for instance, Ireland, where a person really feels a lack of roots, and suffers feelings of deprivation, if he is not born and brought up within one community.

VII THE CONTRIBUTION OF NETWORK ANALYSIS TO SOCIAL ANTHROPOLOGY

When I started work on this thesis - three years ago- I expected to be able to describe a specific corpus of theory which belonged to network analysis and to judge the concept with this broader view in mind. In fact, as I have stressed throughout, there is no such corpus of theory, and so network analysis has to be considered in far more general terms, which encompass a critique of the theories to which it has been allied. Networks only provide a means of ordering or presenting data. However, they have had a considerable impact in recent years in British social anthropology, and it is necessary to evaluate this.

A Empirical areas

Network analysis is seen to have contributed to particular empirical areas of study within social anthropology.

1. Urban

The first area in which the method has been particularly useful is that of urban, complex societies. I have illustrated how this was one of the major factors which encouraged the development of the notion. The opinions of some anthropologists who have used networks in an urban context are of interest:

"The social network orientation seems to be the most productive way of analysing urban situations since it enables closer focussing on the more subtle changes in personal relationships which are perhaps the essence of 'urbanisation' or indeed of any social change." (Oeser, 1969, p.31)

"By using the concept of social network one can analyse informal urban social relationships in a way which admits both the various channels of recruitment to them and their potentially transitory nature." (Boswell, 1969, p.253)

"... one of the major advantages of network analysis is to abstract urban material in a different way, to trace the connection between the individual and the partial, rather than the total system, while still underlining the importance of pressures on individuals involved in conflicting expectations as a result of living in town." (Harries-Jones, 1969, p.298)

"The implication [of networks] is that whereas in 'simple' societies much social interaction takes place within enduring social units that are bounded in space and time and tend to be based on such considerations as kinship, residence or ritual activities, the bulk of interpersonal relationships in 'complex' societies, take place within another sort of social unit, which is transitory and free-floating. It is through networks and fields, then, that patterning and structure may be discerned in the otherwise confusing urban world." (Kushner, 1969, p.95)

2. Unstructured Situations

Network studies first came to prominence in urban situations as I have shown, but in fact, their use in urban analysis was a small element in a far wider field in which they enabled anthropologists to describe and analyse. As Aronson has said, networks are a part of the interest in urbanisation, but beyond that they are also related to:"

- i) concern with types of behaviour which could not be aggregated in analysis of groups and institutions.
- ii) a greater attention to relationships between individuals and groups in one scale unit of political and economic activity, and those in another.
- iii) a movement towards the analysis of choice making, manipulation and other elements, and away from (or beyond) structural description." (1970, p.222)

The method's major contribution seems to have been in enabling anthropologists to work in areas of social life which at first present an appearance of chaos. By concentrating upon micro-analysis they have been able to understand the interactions they observed.

Gutkind - "a network has been suggested as particularly suitable for the analysis of mixed and complex groupings" (1965, a), p.51)

Southall - "for unstructured situations" (1961)

Jay - for "social systems comprising scattered units which display little overall cohesion." (1964)

A.C. Mayer - "an approach of the kind I have outlined (1966) presented itself to me in the 'complex situation' of the Dewas election ..."

"I suggest that the action set and quasigroup are concepts which apply in any situation where no organised groups operate"

Networks "provide means by which complex and detailed data can be presented as clearly as possible" (Gulliver, 1971, p.17)

"Network analysis solves the problem of talking about groups without ~~social~~metrically or constantly fixed boundaries, but avoids the problem of 'occasional groups' which are characterised by extremely rapid changes of personnel". (Provencher)

In fact, the last two authors were working in areas of traditional societies, which would previously perhaps have been analysed in terms of groups. There has recently been a movement to apply networks to such societies in the hope of understanding the society better than through analysis in terms of groups. Lamphere has suggested that previous anthropologists who worked on Navajo social organisation were "trying to validate a preconceived anthropological concept quite different from the Navajo interpretation of social relationships." (1970, p.41) This anthropological concept in that

of the kindred. Gulliver is also concerned to point to its inadequacy.

3. Non-groups

A later contribution of network analysis has, therefore, been to explain in different terms social structures which were previously analysed as containing groups of various kinds. The method has directed attention to the process of creating these social forms, and this is an extremely important aspect of much present anthropological work.

Gutkind has emphasised this refocussing which occurs through the use of networks.

"Networks are defined in terms of action rather than formal structure, of change rather than regularity or stability, and of achieved rather than ascribed social positions." (1965, p124)

It is rare that network analysis has been used to shed light upon the exact process of construction, except in the most gross terms of the anthropologist's perception of recruitment to sets, but there is a recognisable potential in this area.

"The significance of the [network] approach for the study of class in African urban societies may not always have been fully appreciated. If the 'network' model is found adequate to represent otherwise amorphous urban relationships it would seem that class as a subjectively-constructed model within the network is worth investigating. While the class concept could then be expected to vary from individual to individual class categories might well arise in terms of consensus between a series of models being operated." (Reader, 1964, p21)

Barnes has specifically placed networks contribution to social anthropology as supplying a means to 'analyse and describe those social processes involving links across, rather than within, group and category limits '(1968, p.109) The studies of migrants made using the network concept are a clear indication that this area is indeed one to which networks can contribute.

"... I believe that the social network concept allows for the documentation of how, in practice, the individual and the group manipulate various roles both simultaneously and separately. In this respect social network analysis points to the way in which role performance is a part of the operation of a system, or a series of systems." (Gutkind, 1965, p.60)

In this emphasis network analysis supersedes role.

In providing a means of linking the individual and his interactions with the overarching structures of modern societies network analysis is extremely important.

"They [anthropologists] have sought therefore to define units of research and analysis that lie somewhere between the local village and the nation state - units and entities such as networks, quasi-groups, hinge groups and brokers. Entities like these, it is asserted, may be handled by most of the traditional anthropological techniques, while at the same time they may serve to illuminate the links among the local regional and national levels of society." (Manners and Kaplan, 1971, p32.)

"It is possible to see the individual in society as belonging to many categories and participating in many groups. But this two-fold classification leaves us without a means of analysis of very important areas of social life ... To deal with this gap in analytical terminology, the metaphor social network has been introduced." (Frankenberg, 1967, p.18)

Thus, in most areas, the claims of the original proponents of the network method to be able to consider particular problems have been met.

B Theoretical Areas

Bott concludes her 'Reconsiderations' (1971) in these terms:

"There is nothing revolutionary about the idea of social networks. It is the sort of concept that can be used in many conceptual frames of reference. It has been used in conjunction with traditional structural/functionalist theory, in the analysis of societies and groups as open systems and in conjunction with situational analysis, Sociological history and the construction of generative models. What the concept can do is to provide a slight enlargement of the conceptual repertoire. Perhaps we can now see things we might not have looked for in 1954." (1971, p330)

I think it must have become apparent that my major objection to the network studies that have appeared is that they are not revolutionary enough. The continual attempts to 'reconcile' network analysis with structural descriptions of society are, in fact, removing any merit that the concept may have. Mitchell and others of the 'Manchester school' have been the most serious offenders in this way. K. Garbett expressly set out to 'resolve the conflict between anthropologists focussing on institutions and those focussing on ego-centred interaction' (1970, p.227) - a task which he found he could not complete. This is because, as Kuhn has said, we must 'take it for granted that the differences between successive paradigms are both necessary and irreconcilable'. (1962, p.103)

Scientists who are unable to accept a new paradigm are either left behind and produce work which has no relevance or meaning within the new discipline or reject the science itself.

"To reject one paradigm without simultaneously substituting another is to reject science itself. That act reflects not on the paradigm but the man. Inevitably he will be seen by his colleagues as 'the carpenter who blames his tools'." (Kuhn, 1962, p.78)

Unfortunately, network analysts who attempt to concentrate upon the formal description and quantification of the concept are already in such a position.

Reconciliation between two paradigms is impossible. The whole world view of the scientist is involved in the change of paradigm and although it is possible to point out similarities this neutralises the assets of both perspectives. An emphasis upon and development of the points of difference is the only fruitful course.

"One perceptive historian, viewing a classic case of a sciences reorientation by paradigm change, recently described it as 'picking up the other end of the stick', a process that involves 'handling the same bundle of facts' as before, but placing them in a new system of relations with one another by giving them a different framework' ... Scientists do not see something as something else; instead they see it." (Kuhn, 1962, p85)

This is true of all disciplines.

"As Goethe contended, history is continually rewritten, not so much because of the disclosure of new documentary evidence, but because the changing perspectives of historians lead to new selections from the data." (Shibutani, in Manis & Meltzer, 1967, p.162)

"What counts is the point of view from which the scientist envisages the social world." (Schutz, in Emmet & MacIntyre, 1971, p.108)

"The selection and explanation of facts [by the social sciences] has heretofore proved provisional; it has to be done over again with every change in the general current of thought. But is this not true of all science? At the moment the whole theoretical trunk of physics has been torn up by the roots and seems likely to be thrown upon the rubbish pile. A lasting structure of knowledge is hardly to be expected, except as regards the primary facts and their simpler relations, and this much we may expect in social science as well as spatial." (Cooley, in Manis & Meltzer, 1967, p.78)

Such a view of science as providing interim judgements rather than moving systematically towards some absolute truth is itself a part of the paradigm. It is not a view shared for instance by Gluckman who is a staunch upholder of the old paradigm and believes in scientific progress and methods.

In social anthropology the process of reanalysis of old data is well under way within the new paradigm's terms, and is providing some interesting new insights. Seddon, for instance, has argued that kinship and friendship are, in fact, both "idioms employed by the members of a society as principles of association or grouping, and which (from the observer's point of view) provide the individual with easily manipulable networks of social relations that besides their effective aspects, may bring benefits in terms of access to scarce or distant resources or of insurance in an uncertain 'natural' or social environment".

Kinship is defined as "a general idiom, based on a concept of biological relationship, which may clothe, or be used to clothe, a variety of social relationships, but which almost always, bears strong positive affective overtones." Friendship^{**} is a "general idiom, based on a concept of warm interpersonal affection and trust which may clothe or be used to clothe a variety of social relationships."

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Paine and others have discussed friendship recently, but before the new paradigm directed attention to such informal relationships they were rarely mentioned. In fact, when I was deciding what to write my thesis on I considered writing on friendship and worked on it for about three months. I then realised that information on the subject was simply not present in most monographs as it has not been a part of the factual realm which the old anthropological paradigm considered.

Sahlins has discussed descent groups in the same terms and concluded that "in major territorial descent groups, there is no particular relation between the descent ideology and group composition." (1965) Colson has ruled that "those who help one another in a particular fashion are relatives, and those who do not help one another are to be considered unrelated." In this she alters the whole perspective on kinship.

Kaberry has also reconsidered the plasticity of New Guinea kinship. Baric has analysed Yugoslav kinship in terms of choice and network.

This all represents a fundamental reorientation within anthropology, and although it is quite possible to argue that anthropologists have always seen kinship as an idiom of expression of social relationships this, in fact, glosses over the fact that a real change in paradigm has taken place. By removing the extreme elements from both the old and new anthropologies the teeth are drawn of both. It is far more courageous, and ultimately far more constructive, to be able to dismiss the work of the old paradigm and utilise to the full the new, even when one's past work is thus invalidated, as George P. Murdock has done in his 1971 Huxley Memorial Lecture.

1. Events and the role of the anthropologist

The major reorientation which is occurring in the social sciences resolves around a reappraisal of the role of the observer. One aspect of this is an emphasis upon the ultimate subjectivity of experience to which I have

alluded before. A second aspect of this reappraisal is an awareness of observer's influence upon the situation he is observing and a willingness to capitalise upon his interaction with those he observes. Previously, the problems of communication and interaction between observer and observed have been studiously ignored to the enormous detriment of the social sciences - particularly anthropology, as Liam Hudson points out:

"Problems of meaning abound whenever one person attempts to understand another he does not know intimately. And when he does know him intimately they still abound. For their relationship will have generated a context of social rituals, jokes, tacit assumptions, that enable them to negotiate the dangerous particles their relationship contains. Consequently, any agreement they reach may reflect no more than the existence of a common mini-culture between them. Problems of meaning thus affect not just Anglo-Saxon communicating with Zuni, middle-class communicating with the working class. They arise whenever two people attempt to communicate about aspects of their lives which are other than banal. The intriguing aspect of this semantic quandary is not that it exists in the human sciences, but that psychologist sociologist and anthropologist have conspired so successfully to ignore it.

The extreme case is that of the anthropologist. Member of an economic sophisticated society, he goes off into bush or jungle to appraise a way of life dissimilar to his own in almost every particular. At best, he has a foreigner's grasp of the language and is usually forced to communicate through interpreters or middle men; people marginal to both the cultures in question. The fruits of this curious interaction are then published as objective evidence about the primitive culture observed. Discussed with exemplary candour by at least one of the subject's founding fathers, W.H.R. Rivers, such lacunae have since been glossed over by anthropologists preoccupied, like their neighbours the psychologists, with their own emergent professionalism." (Hudson, 1972, p.151)

In network analysis I have already pointed out how Elizabeth Bott (1957) recognised and articulated the emotional involvement of the interviewers with the families they were studying. In doing so, the understandings of the interviewers were utilised in the study rather than suppressed.

Whitten (1972) explained the difference between negroes in Nova Scotia and Ecuador in terms of the way in which he was incorporated into the social system in each case. He finds that the cultural game of exchange is quite different in the two societies, although the networks are structurally similar (1970a, p.400⁴⁰³). (This finding demonstrates again that structural comparisons of networks are likely to ignore the most important aspects of social interaction).

Whitten concludes:

"Data gathering through modified genealogical method inevitably involves the investigator in activities of strategy and power within the arena in which he is working. The investigator cannot disregard his strategic significance in a system and insist that he is 'merely gathering data'."

Having understood his role in a system, there is no reason why the field investigator should not characterise the capacity of the system to exploit opportunities. Only by doing a characterisation are we likely to gain the opportunity to later test our ideas.

"... the ethnographic gathering of data itself involves a process that has strategic significance for actors in changing situations. Since the anthropologist is thereby ipso facto an agent of change, he may use his role and his effect to generalise ^{the} to areas of interest that include the capacity of systems to change." (Whitten, 1970, p.401-2)

The importance of the investigator is coming to be recognised by many social scientists.

"As regards the 'field of the present' - i.e. the actual presence of the investigator/researcher at the phenomenon/event being studied - we should extract what advantages we can from those well known scientific inconveniences themselves as far as possible. First of all, that is to say, we must exploit - in depth and from every available angle - the possibilities opened up by the presence of the investigator in the actual process. We can do this by maximum use of on-the-spot observation, not only through the utilisation of all available recording devices (tape recorders, cameras, etc.) but also by increasing the number of observation points (emphasis on team work). Avoid repression, rather exploit the investigator's

personal sensibilities. What I have elsewhere labelled sociological Stendhalism or Balzacism-Proustism even. Another way in which the investigator can make use of his presence is by actual intervention." (Morin, 1971, p273-4)**

It seems to be inevitable that the observer will have to move outside his low profile of the past and expose his own viewpoint and position to examination.

A related emphasis is the interest in studying events. This is to be viewed as a logical outgrowth of concern for process and change. Events reveal adaptive mechanisms and provide a way of approaching social change. In traditional sociological and anthropological approaches an event or happening is regarded as something to be set aside if we are to appreciate the true social realities, these being associated with repetition, regularity and more often than not, 'structural' pattern.

"We believe, however, that an event must be treated first and foremost as informative evidence - i.e. as a new element which not only infiltrates the sociologist's mental outlook but affects his social assumptions as well." (Morin, 1971, p.207)

This trend is apparent in ethnomethodology particularly, and also in anthropology in situational analysis, extended case analysis and the method of social drama all depend for the very stuff of their analysis upon events. Again, network analysis has been united with this emphasis - for instance in the work of Kapferer and Boswell. It is in this type of

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It is of great interest and significance that French sociology, which has different intellectual roots again from British and American, should be moving in such a similar direction. The similarity between ethnomethodology happenings and Morin's suggestion that the sociologist intervene. This could range from a series of questions going beyond the ordinary questionnaire, with the object of provoking specific social reactions (not merely of opinion but also of behaviour) in any given situation, to what might be termed 'maeiutic' intervention. Also the reference to novelists is interesting.

analysis that networks can be particularly helpful in providing a clear method of presentation and description. **

The recognition of the observer's influence on and participation in the events he observes allows for the full exploitation of his sensitivities and understandings. It raises a fundamental problem, however, in that it becomes apparent that social science is no more than the understandings of several people of particular problems or societies. Social scientists may claim that they are able to draw on a wider knowledge of social processes than the layman, but ultimately the difference between them is one of quantity rather than quality of knowledge.

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In fact, anthropology has an enormous strength in that it has the best method in terms of the new paradigm as one of its major identifying features.

This is participant observation. In entering a new society the anthropologist is forced into the position of questioning all his assumptions about the meanings of social interaction. At the same time he has to crack the code of the society which he enters. In doing this he has to learn the 'recipe knowledge' of that particular culture.

Simultaneously, his presence creates a disturbance in the social life of the people he interacts with which again can be very revealing. The process by which his presence becomes acceptable and the way in which he enters into the exchanges of the people he now lives with lay bare the basic assumptions of those people. Whitten has utilised this notion with enormous success. His work is enjoyable to read and presents real insight into the life of the people.

It is thus ironical and tragic that anthropology is adopting the discarded methods of sociology such as questionnaires and statistics. As Jarvie has said - a generalisation is no better than the particularisations upon which it is based. Manners and Kaplan have put the convergence of anthropology with the other social sciences through the use of sociological methods as the first of their two major trends in the future of anthropology. This at a time when Morin can write that he sees sociology as 'bogged down' by questionnaires and statistics, and suggest instead a multidisciplinary approach to avoid the disintegration of phenomena as they are studied.

cont.

2. The Consequent Role of Anthropology and Social Science

Once the thesis of methodological dualism is dismissed - as it has been in the new paradigm, social science faces the old charge that it is dealing with nothing but commonsense, and that it descends to the level of anecdote. This criticism has been levelled at ego-oriented approaches particularly, including network analysis.

This ego-oriented type of analysis:

"offers insights and knowledge of contemporary African urban social life not readily observable and obtainable through conventional survey techniques. However, my technique is not intended to serve as a substitute for traditional analysis; I regard it as a supplement to them, one which adds subjective data and the types of analysis used by novelists". (Plotnicov, 1967) (my emphasis)

Inevitably such description becomes anecdotal - as Morin and Plotnicov have hinted:

"If the ethogeny of social behaviour is revealed in the accounts and commentaries of social actors, how do we subject this material to scientific treatment? How do we prevent a social psychology that pursues the ethogenic way from descending into anecdote? The achievement of extracting a science from anecdotes is largely a matter of having an adequate conceptual system for the analysis of accounts and commentaries. Understanding - the ultimate goal of a non-positive science - is achieved partly in the deployment of a good conceptual scheme." (Harve 1971, p.582)

To return to the Plotnicov's reference to the novelist - Poole has described the process of reading a novelist or philosopher:

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Any strength anthropology has lies in its method of participant observation. To abandon this and yet again follow into a paradigm that is already irrelevant in the areas it owes its inception to, is to duplicate the enormous error of following the rejected model of the natural science.

To some extent ego-oriented approaches, including network analysis, escape from this monumental error.

"His space, the limits of his world, are for the time being, accepted on trust, while we explore that world. Every term he uses, every assumption he makes, refers to the architecture of his system, refers to the structure that he is bringing into being through his writing. For the first part of our reading and thinking we are completely passive, absorbing. Then we begin to transform his terms into our terms. A cross-fertilisation of two lived spaces begins to happen, a strange spatial mutation takes place, a symbiosis. I begin to inter-penetrate into that space, my spacē, my thought-world begins to happen alongside that man's and I am suddenly 'understanding' him. His space is acceptable to me, it is freeing and not cramping (otherwise this system would never have begun, I can feel myself into its space, I can rely on it. Above all it helps me to think. I grow in capability as I read. I can take hurdles I couldn't take before. Fear decreases.

Then finally the terms in which he is expressing himself have to be transformed into my terms." (1972, p.143)

The notion of the social scientist as an elevated expert on social systems is one which is undermined by the recognition that ultimately his understanding are those of a human being such as those he observes. The parallel with the novelist's task of making experience accessible to his readers helps to underline this.

"This [subjectivity] does not mean that the social sciences have nothing to offer, but it does mean that people cannot evade the responsibility for political decisions by inventing the omnipotent godhead of science, the pure 'facts' the answers of which are 'right'. What the right answer is depends upon who you are, whether you are rich or poor or something else" (Harris, 1971, p.223)

The use of social science to establish the 'facts' is widespread - based upon the assumption that they can see more than the non-social scientist person. Chomsky says ^{that} this is a false assumption.

"Anyone can be a moral individual, concerned with human rights and problems; but only a college professor, a trained expert can solve technical problems by 'sophisticated' methods. Ergo, it is only problems of the latter sort that are important or real. Responsible non-ideological experts will give advice on tactical questions; irresponsible, 'ideological types' will harangue about principle and trouble themselves over moral issues and human rights, or over the traditional problems of man and society, concerning which 'social and behavioural' science having nothing to offer beyond trivialities. Obviously, these emotional and irrational types are irrational, since, being well off, and having power in their grasp, they shouldn't worry about such matters.

At times this pseudo-scientific posing reaches levels that are almost pathological." (1967, p269)

"There is more that can be said about this topic, but, without continuing, I would simply like to emphasise that, as is no doubt obvious, the cult of the expert is both self-serving, for those who propound it, and fraudulent. Obviously, one must learn from social and behavioural science whatever one can; obviously these fields should be pursued in as serious a way as is possible. But it will be quite unfortunate, and highly dangerous, if they are not accepted and judged on their merits and according to their actual not pretended, accomplish merits.

... To anyone who has any familiarity with the social and behavioural sciences ... the claim that there are certain considerations and principles too deep for the outsider to comprehend is simply an absurdity, unworthy of comment. "(1967, p.271)

The notion that the social scientist is able to present the facts of a situation has allowed social theories to be used to invalidate protest and to uphold the status quo.

...we must also expect that political elites will use the terminology of the social and behavioural sciences to protect their actions from critical analysis - the non-specialist does not, after all, presume to tell physicists and engineers how to build an atomic reactor. And for any particular action experts can be found in the Universities who will solemnly testify to its appropriateness and realism." (Chomsky, 1967, p.252)

To give an examples from my own experience. The Irish government have commissioned a Research Project on Attitudes to the Irish Language. Through various machinations two American professors were chosen to head the project (I say 'machinations' because it appears that they are friends of the only resident American anthropologist in Eire). They came to Ireland equipped, supposedly, with the most up-to-date theoretical knowledge of socio-linguistics and anthropology, particularly with reference to the use of computers. They were accompanied by another friend - a linguist. There were 15 research assistants - myself being one. The original plan was radically altered after we had been trained,

when the professors arrived from America. Interviews were to be organised with various sections of the population in order to elicit the variables to be examined in a questionnaire to be given to 1% of the population. It is apparent that all that is going to be learnt from these interviews is what is already known by most Irish people - such as that Irish is positively valued by some people of the middle class, but that only those whose jobs require it - those in the Civil Service and teaching - make any attempt to use it; that in the west, extremes of opinion exist - some people seeing it as a positive hinderance to emigration, other ferociously aware of their language and anxious to escape the Dublin power structure and its investigations on their attitudes to the Irish language. The major fact is that people who have power in business and so on are not on the whole interested in the language, and, in fact, model themselves to a large extent on what they see as the British way of life. Clearly the situation is far more complex and I cannot put down all that I picked up coming from outside within six months. The government would be able to gather all this information, however, directly from the sub-committee it appointed to appoint the personnel of the project. They are Irishmen and women particularly involved with the Irish language in various capacities. Appointing American social scientists gives an air of impartiality, and beyond that - of scientific objectivity about the whole thing. The implication is that these highly trained outsiders will be able to get at the real truth. In fact, all they will present is a collection of views and statistics no more 'objective' than those of the Taoiseach or anyone else in the country. A far more useful role would be that of an ombudsman who could provide a channel of communication between the government and the people.

To an extent the whole project is a way out of an impasse in that it is impossible to satisfy the extremists who oppose or support the Irish language. The government is able to say (as it does frequently) that there is an impartial study under way which will present its recommendations in so many years time. It is difficult to see what will happen if recommendations are made. From a personal point of view of the situation I would suspect that nothing spectacular will come of it - the most being the possible removal of compulsory Irish in schools, which has been suggested for some time.

Meanwhile, about twenty people are employed to get at the truth of the matter, in a scientific manner. It is only by raising social science and its practitioners to a position which they cannot possibly merit that such a situation can come about.

3. The Reactions of Social Scientists to the new role of Social Science, and their expression in network studies.

In the light of this profound reappraisal of the social scientist's role - at the level of his interaction with the people he observes, and at the level of his role in the society and political system in which he lives - there are two distinct reactions on the part of social scientists:-

1. One is to recognise that the social sciences cannot continue in their pretence of understanding human life in a way which is inaccessible to those not trained in academic disciplines. This requires that the anthropologist is prepared to reassess his own role and the aims of his discipline.

2. The second reaction is to attempt to preserve an aura of superior understanding in order to defend the position of the social scientist as a fount of objective facts not available to the layman. In order to do this, mystification of the job of the social scientist through the introduction of abstruse notions is essential.

Network analysis has been used in both contexts.

Philosophies which allow a position of primacy for the individual's understanding are also gaining ground and give strength to the first reaction to the changed systems of social science.

"But if the type of philosophy that a man chooses depends on the type of man he is, then each and everyone of us has a right to a philosophy of his own, a right to a space he can think in, a right to his own subjective thought world.

It is a daring contention. The massed expertise of the professional will of course oppose it to the last ditch. To assert that subjectively chosen conceptual space is open to each and every thinking being is, in our age, tantamount to treason against the State. Dare we, nevertheless, think it, assert it, to be true?" (Poole, 1972, p.142)

It would seem that such a philosophy is, in fact, at the basis of the view of anthropology as making experience accessible to others. Each man's understanding of life and his situation is ultimately unique and valid. There is clearly an enormous body of shared knowledge and understandings which exist as a result of communication and interreaction between human beings. But beyond that there is a realm of the purely personal. Ethnomethodology and other sociologies attempt to elucidate these shared understandings by questioning them, as the basic assumptions of society are questioned by other radicals. ^{***} on next page

One of the new trends in sociology which is a part of the first reaction is Gouldner's 'reflexive sociology'. In essence the ideas behind this have been mooted by different writers over a considerable time span. For instance Gough has written:

"I suggest that an anthropologist who is explicit about his own values is likely to frame his problems more sharply and to see more clearly the line between values and data more than one who has not examined his values." (1968, p.149)

This theme echoes that of the phenomenologists among them Alfred Schutz and other recent movements in sociology, such as symbolic interactionism.

It is worth giving Gouldner's conception of what a Reflexive Sociology involves:-

"From the standpoint of the reflexive sociology, however, the assumption that the self can be sealed off from information systems is mythological. The assumption that the self affects the information system solely in a distorting manner is one-sided; it fails to see that the self may also be a source both of valid insight that enriches study and of motivation that energises it. A reflexive sociology looks, therefore to the deepening of the self's capacity to recognise that it views certain information as hostile, to recognise the various dodges that it uses to deny, ignore or camouflage information that is hostile to it, and to the strengthening of its capacity to accept and to use hostile information. In short, what reflexive sociology seeks is not an insulation but a transformation of the sociologist's self, and hence of his praxis in the world."

A reflexive sociology then, is not characterised by what it studies.

"It is distinguished neither by the persons and the problems studied nor even by the techniques and instruments used in studying them. It is characterised, rather, by the relationship it establishes between being a sociologist and being a person, between the role and the man performing it. A reflexive sociology embodies a critique of segregated scholarly roles and has a vision of an alternative. It aims at transforming the sociologists relation to his work." (1971, p.495)

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The overturning of socially accepted ideas is apparent in many areas. For instance Neurotics Anonymous advertise by the slogan "Neurosis is Normal - how's yours?" The acceptance of the validity of each person's experience which this implies is a development of the humanistic perspective on man presented by Bertrand Russell. It requires that social scientists must become aware of themselves and their existential social position as Maquet calls it. And in the end they are forced to realise that their knowledge of society cannot differ in quality, although it may do so in quantity, from that of the people they observe.

This type of approach is already being used outside sociology. For instance, Professor Hudson in his book "The Cult of the Fact" provides an autobiography in which he attempts to understand and explain his own motivations and values in terms of his life experience. It is not a totally new orientation, but is one which has suddenly gained adherents in recent years.

Jack B. Douglas has edited a book of articles on "Understanding Everyday Life" in which the point is forcibly made that ultimately all statistics and other abstractions are based firmly on the commonsense understandings of the participants.

"There is no way of getting at the social meanings from which one either implicitly or explicitly infers the larger patterns except through some form of communication with the members of that society or group, and, to be valid and reliable any such communication with the members presupposes an understanding of their language, their own understandings of what the people doing the observations are up to, and so on almost endlessly." (J.B. Douglas, 1971, p.9)

Thus, the aim of making knowledge transsituational which is the declared aim of existential phenomenological sociology, rests for its fulfillment upon the understanding the observer has of the society and culture he is studying.

Once the right of every individual to a particular philosophical space (Poole) is recognised, the right of the social sciences to demarcate a particular area of study as their own, comes under question. Since every man understands the society in which he operates at least enough to function within it, how can the sociologist claim a discipline based on the study of social systems? It seems that the position of social science is precarious.

On a far more abstract level Foucault has also predicted the demise of the human sciences:

"One thing in any case is certain : man is neither the oldest nor the most constant problem that has been posed for human knowledge. Man appeared because of a fundamental change in the arrangements of knowledge. As the archaeology of our thought easily shows man is an invention of recent date. And one perhaps meaning its end." (1971, p.387)

"If the arrangement of knowledge was to shift again "then one can certainly wager that man would be erased, like a face drawn in sand at the edge of the sea." (1971, p.387)

"it is comforting, however, and a source of profound relief to think that man is only a recent invention, a figure not yet two centuries old, a new wrinkle in our knowledge, and that he will disappear again as soon as that knowledge has discovered a new form." (1971, p.xxiii)

Foucault's argument is extremely complex and only marginal to the central theme of his book 'The Order of Things'. He suggests that there are three 'sciences' which cover the domain of the human sciences - biology, economics and philology. From these 'sciences' are derived three models of explanation used in the human sciences - from biology comes the notion of the functions possessed by man, and his evolution to adapt to an environment - from economics man appears as having needs and desires, which he satisfies by entering into a situation of opposition to other men, irreducible conflict results; - from philology "on the projected surface of language man's behaviour appears as an attempt to say something."

"Thus, these three pairs of function and norm, and conflict and rule, signification and system completely cover the entire domain of what can be known about man." (1971, p.357)

The development of anthropology can be seen in terms of these three models. Evolutionism derived from biology, in the works of Frazer, Tylor and later White, needs and economic man appears in Malinowski's studies and later in exchange theories and Barth's transactions. We are now moving into

the realm of philology and concern with meaning, signs and signification are central to the new model. With Freud and Dumezil the shift has been toward language.

The problem of representation and its relation to the conscious and unconscious is a major one:-

"it is easy to understand why every time one tries to use the human sciences to philosophise to pour back into the space of thought what one has been able to learn of man, one finds one self imitating the philosophical posture of the eighteenth century, in which, nevertheless, man had no place; for by extending the domain of knowledge about man beyond its limits one is similarly extending the reign of representation beyond itself, and thus taking up one's position once more in philosophy of the classical type. The other consequence is that the human sciences, when dealing with what is representation (in either conscious or unconscious form) find themselves treating as their object what is, in fact, their condition of positivity." (1971, p.363-4)

In fact, Foucault sees reflexivity as entering philosophy at the same time as man appears as an object of study.

"It is, therefore, not man's irreducibility, what is designed as his invincible transcendence, nor even his excessively great complexity that prevents him from becoming an object of science. Western culture has constituted, under the name of man, a being who, by one and the same interplay of reasons, must be a positive domain of knowledge, and cannot be an object of science." (1971, p.367)

Foucault demonstrates that the human sciences exist in a certain situation of 'vininity' with regard to biology, economics and philology (for linguistics); they exist insofar as they dwell side by side with those sciences - or rather beneath them, in the space of their projections.

"The human sciences are not, then any analysis of what man is by nature; but rather an analysis that extends from what man in his positivity (living, speaking, labouring, being) to what enables this same being to know (or seek to know) what life is, in what the essence of labour and its laws consists, and in what way he is able to speak. The human sciences thus occupy the distance that separates (though not without connecting them) biology, economics and philology from that which gives them possibility in the very being of man.

... this is why what characterises the human sciences is not that they are directed at a certain content (that singular object the human being) it is much more a purely formal characteristic; the simple fact that in relation to the sciences to which the human being is given as an object (exclusive in the case of economics or philology, or partial in that of biology) they are in a position of duplication, and that this duplication serves a fortiori for themselves." (1971, p.354)

In the end the inward turning of subjectivity must be seen as a duplication of what is anyway already existing. Introspection must turn outward. As Tom Stoppard said - "we must act even though we cannot 'know anything." It is only this way that the deadening irrationality that Toffler fears will be avoided.

Manners and Kaplan foresee a second major trend in anthropology - toward increasing relevance and application to particular problems. In this I would agree with them, in that it is only, as Schutz has said, with reference to a particular problem that we can align ourselves in any study.

The role of the social scientist must become that of a communication channel between people who are planned for and planners. In this he must and should loose the trappings of omnipotence which he has at present and must be in a position to understand his own motives and values.

This discussion of the future of the social sciences has led me to the conclusion that once Methodological Dualism as a thesis is displaced.

The second reaction to the apparent change in status of the social sciences is to attempt to reinforce the view of the social sciences as, providing insights which are not available to the layman.

This may take various forms but basically it requires that social science is made inaccessible to anyone except those who are conversant with the theories of the academic discipline. A closed shop is set up into which only those who have shown they conform to the moves of the discipline by taking exams and so on, can enter.

Bob Roshier has suggested (New Society, August, 1972) that ethnomethodology is a means of elevating sociology above the understandings of all who are not committed to the discipline:

"These techniques [the use of complex sentence structures and ordinary words in extraordinary contexts] amount to a systematic and apparently deliberate attempt to disguise what are essentially simple points. At the same time ... it provides a 'language' which is at least potentially available to those who are keen enough to learn it, made up of key terms whose meanings are not available to outsiders."

"Perhaps it is significant in this respect that there seems to be a link between the use of especially obscurantist modes of expression and the revolt against positivist (i.e. natural science based) methods in sociology. The rejection of positivism and the consequent emphasis on the subjective universally accessible nature of sociological understanding has brought sociology, in its own terms dangerously close to the age-old criticism of it - that it is just 'common-sense' and thus available to everyone (the worst thing that could happen to any academic discipline) In practice, then, the only expertise that the new sociology can fall back on to meet this threat is its use of a highly specialised, obscure language."

Within anthropology networks seem to have been used in a similar way to invest the discipline with a mystique which lifts it beyond everyday understandings. The attempts to quantify data, and refine concepts seem to provide ample evidence of this occurring.

Barnes (1968 and 1970) does not appear to be trying to make his methods understandable and accessible to others, but rather to demarcate a sphere of investigation for himself. Mitchell (1969), Wolfe (1970) and several others seem to be using networks in a similar obscurantist way.

Network analysis which relies on the use of terms which are inaccessible to all but an inner sanctum of avid users of the technique is already bringing the method into disrepute. As a result such studies are unlikely to have any lasting influence on anthropology or the method's development. In this context they merely provide a means of carving an academic niche for some anthropologists who are likely to become more isolated from the main developments in anthropology. Precisely why networks provide such an excellent means of demarcating a sphere of study in anthropology was outlined in Chapter I. It is not necessary to consider this type of study in a discussion of the network methods contribution to social anthropology's development, since it provides merely a diversion from a more fruitful type of network analysis.

4. The Contribution of Network Analysis to the future of Social Anthropology

Since we must now inevitably espouse the new paradigm we must consider network analysis within the new frames of reference, and accept that any attempt to unite it with the old paradigm effectively removes any interest the method may hold for us.

We are then faced again with the obvious and crucial fact that network analysis is only a method and must be allied to ~~a~~^{an} theoretical framework. In the past all too few of its practitioners have made explicit their assumptions, which has proved to be ^{an} enormous obstacle in realising the methods potential. As Garbett has said:

"Which theoretical perspective is adopted will determine the dimensions of the situation which are studied, the kinds and levels of abstraction made, and the nature of explanation of the events."
(1970, p.218)

The undeniable fact that the potential that network analysis was credited with has not been fulfilled lies, at base, in the inadequacies of the theories to which it has been allied.

"although the basic attraction of the network approach is that it promised a way of studying the problems of social change and process, very little theoretical progress has been made in this direction. This is due to the point Kapferer makes: 'without an input of theory there can be no set of derived hypotheses relating to change'." (Boissevain, 1972)

As more evidence of the concepts failure I would cite the fact that Epstein, one of its earliest practitioners, has not used the method in any of his new data, and his 1969 article is a rehash of old data. Similarly, Barnes, who is a major figure in the method's development has not used it in the analysis of any data at all, since 1954. ^{**} I suggest that if the method had any great potential in the formalistic application which Barnes et al suggest it would not have been so neglected.

** see foot of next page

In assessing the overall importance of network analysis up to the present time it seems to be possible, however, that it has provided a major change in methods of presentation which has - as Jarvie foresaw and hoped - provided a way out of the crisis situation which anthropology found itself in a decade ago. However:

"While there is a need for some comprehensive theoretical tool, some systematic analytical framework ... it is doubtful that any single concept will suffice." (Plotnicov, 1967, p.11.)

Undoubtedly the term itself has passed into the language of the social sciences, but it has done so in a general sense - a sense in which it is understandable to anyone in fact - and formalistic and jargonistic exercises are seen to have been singularly unfruitful.

For instance in Whitten's anthology, 'Afro-American Anthropology' (1970), Hannerz, Whitten, Nelkin and Despres all use the network concept to consider various different problems. Only one of the articles presents

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On an extremely cynical, but relevant note, one of the contributions that network analysis has made to the social sciences is to install John Barnes as Professor of Sociology at Cambridge.

"The sociological world watched with bated breath - was it for 2 years or 3? - while Cambridge decided on the appointment to a Chair in Sociology ... The man finally chosen was John Barnes, who had achieved a reputation not only as a social anthropologist and Africanist, but also as the inventor of the concept of 'network'." (Percy S. Cohen, Man, 1971, N.S., vol. 6, No. 4, P.721)

The concept of network has attracted so much attention in recent years that to claim to be its inventor is undoubtedly a prestigious point in Barne's favour. This could account for his return to the subject after about fifteen years' silence on the topic.

specific network data. In the others the concept is used metaphorically. This type of usage is already so prevalent in anthropological studies as to no longer cause comment. Networks have in this sense become an important new element in anthropology.

Barth has recently written:-

"this perspective on scale does not attempt to derive structural principles by abstracting from network form. Rather, it seeks to identify the kinds of network that can be and will tend to be generated by actors interacting by means of certain organisational aids. I would argue that it is not necessary, or indeed possible, to reconstruct those organisational elements from a mere record of network form in a community. To provide such data in a systematic way is most difficult and in itself insufficient whereas the organisational elements are more readily identified by a close micro-analysis of encounters where the opportunity situation of each actor can be observed." (1972, p.218)

It is in this general type of usage that network is likely to continue to be part of anthropology's vocabulary. Defining the term more and more strictly is in fact making the whole idea far more narrow and rigid than its forebear - the group. In this way, network analysis has become a dying gasp of an old functionalist paradigm, as Ardener pointed out, concerned with classifying and describing for its own sake.

Personally, I feel that the idea has almost been discredited already by recent abstract and abstruse discussions of terminology. And I write from the point of view of one, who, three or even two years ago, firmly believed that the network concept had a great deal to offer anthropology, and was anxious to produce a workable set of defined terms. Having worked with empirical data and tried to make use of existing terms I am now firmly convinced that definitions have to be closely related to the topic under examination and that any universal definition will force information into an even more rigid set of preconceptions than that of group, role and so on.

Some more positive aspects of networks' contribution to social anthropology are of a broader nature, and reflect the way in which network analysis can be a part of the new paradigm if it is not forced into the assumptions of the functionalist school.

The recognition that description and analysis are one and the same by network analysts brings the idea in line with schools of thought derived from phenomenology.

"Indeed, we would argue that description is 'merely' analysis using yesterday's categories, just as analysis is 'merely' description in terms of tomorrow's categories." (Barnes and Epstein, comment on Eisenstadt, 1961, p.210)

They also remark that "others of us are content to describe social life as perceptively as we can, without worrying too much about the discovery of social laws."

This fits firmly into the new paradigm which allows for appears to be accepted rather than debunked. As P. Cohen says, "the difference between analysis and description is a matter of degree." (1969, p.223)

The reorientation to stress the individual's capabilities and creativity is a central element of the new social sciences and networks clearly can emphasise this. They could also be used to separate emic and etic concepts however, an area in which their potential has so far been missed.

"Social anthropology compares from the outset, moving constantly from the individual to the general and back to a more refined understanding of the individual. And before this can be done social anthropology must liberate itself from the romantic conflict of individual and society and effect the union of these opposers whose interaction is the unit of study." (Pocock, 1961, p.114)

Network has effectively united these opposites, and it is probably in doing this that it has made its greatest contribution to social studies.

I would not agree with Abner Cohen when he writes of action theory anthropologists that:

"When this orientation is pushed to its extreme and is presented, as Boissevain (1968) does, as a substitute for the 'old methods' it becomes one-sided and thus gives a distorted picture of social reality. To put it metaphorically, the microscope that this school holds is so powerful in disclosing the details of face-to-face political interaction that it is powerless, or out of focus, to reflect the wider structural features of society." (1969, p.224)

On the contrary I would see Boissevain's major contribution as being to push the orientation to its extreme which is where it will add most to the development of new anthropological theories.

It is not true that a concentration upon the micro-processes of social life eliminates a consideration of the wider structures. Ultimately, our only experience of such structures must be through interaction with other people, although we may read and hear about them indirectly. The problem with much network analysis up to now is that the assumptions which it has been linked to have cut it off from meaningful elements of interaction. By not embracing the full significance of the meanings of interactions, all symbolic aspects, and thus the hidden understandings which ethnomethodology particularly is so concerned to unearth, have been jettisoned. By allying with a theory such as symbolic interactionism this becomes central to any analysis, and in this way network analysis

could take on a quite different and far more constructive complexion.

The symbolic order is present in the interrelationships we conduct with other people:

"Social anthropologists analyse symbolic forms in order to discover their symbolic functions. One of the most important of these functions is the objectification of relationships between individuals and groups. We can observe individuals objectively in concrete reality, but the relationships between them are abstractions that can be observed only through symbols. Social relationships develop through and are maintained by symbols. We 'see' groups only through their symbolism. Values, norms, rules and abstract concepts are made tangible through symbolism, and men in society are thus helped to be aware of their existence, to comprehend them, and to relate them to their daily life."
(A Cohen, 1969, p.220)

Cohen here provides a scheme which demonstrates clearly how relationship symbols and values relate to one another. By fitting network as a method into this scheme a really interesting and meaningful anthropological study could be produced. Whitten (1968) has done so, by using networks to analyse the 'symbolic expression of social relationships'

It would basically provide insights into exactly how an anthropologist learns about the new social system he enters. This would resemble the way in which languages are now taught - through total immersion courses which try to teach a language as a native would speak it.

Ultimately, such an approach rests upon the recognition that any person learns about his society through interaction with other individuals. In these interactions definitions of reality are tested and agreed upon. It is only in this way - through shared language and symbols - that society or culture exists. From this premise the new paradigm in social science follows, with all its numerous ramifications, some of which I

have pointed out, others of which remain hidden as background assumptions.

In order for network analysis to become a satisfactory method of social anthropology it is essential for certain elements to be incorporated into each study.

1. A statement, as far as is possible, of the assumptions and theories of the analyst. In Maquet's terms what is required here is a statement of the anthropologist's existential position.
2. A clearly formulated problem which is to be examined. Without this it is impossible to understand why particular variables are being regarded as relevant.

These two elements should make it possible for the reader to understand the particular framework within which the analyst is operating and thus his bias. They are not merely an essential fact of a network analysis, but of any anthropological study.

Beyond these crucial general requirements networks provide an excellent way of presenting a clear account of how information is learnt.

3. The clarification of acting where each impression is gained provides a clear basis for the presentation of the actor's viewpoint on the social system which can be related to his existential position. It is only in this way that we can begin to appreciate the subtleties of any social system.

4. An awareness of the observer as a person existing at the centre of a particular network must also be communicated. He is inevitably a part of the social processes which occur around him, and can be conceptualised as usurping power from other social networks.

It is apparent that basically what is essential is a far greater attention to the presence of the ego in any situation of participant observation. The recognition of the importance of the individual's perceptions and his own social role will prevent any facile and oversimplified statement about the nature of reality.

The quantification of data on social relationships is peripheral to any such presentation, and in fact, removes from consideration the nuances implied in social interaction.

The anthropologist may be in a position to describe societies perceptively because of his awareness of alternative social forms but ultimately his understanding is not of a different order from that of the natives.

The concept of Methodological Dualism is one which raises a difference in quantity of knowledge to one of quality.

Once the analyst becomes aware of his basic humanity which he shares with those he observes, he must pay due attention to their understandings and consciousness. It is only within this context that network analysis will provide a means of presenting descriptions and explanations of alien societies and cultures which are available to members of our own culture.

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APPENDIX I

The Manchester School' of Anthropology

In criticising the assumptions underlying network analysis - particularly the supposed need for empirical, objective studies - a particular school of thought associated with Max Gluckman and Manchester University has become apparent. Since this group of anthropologists have provided much of the impetus for the development of the network concept it is necessary to consider their work - other than in network analysis - in more detail.

They themselves regard themselves as a distinct school within British social anthropology and are well aware of their cohesiveness. Gluckman wrote in his introduction to the 2nd edition of Elizabeth Bott's book that when it first appeared he said: "I wish that book had come out of our group". Mitchell has also recognised the existence of a particular Manchester School of thought, with which networks are intimately associated.

"That several of us had been interested in social networks is not difficult to explain. Several of the staff at the University College had had close associations with the Department of Social Anthropology and Sociology at Manchester where John Barnes had been a Senior Research Fellow at the time when he was studying Bremnes and where he had developed his paper published in 1954, which provided the point of departure for Bott's seminal study. The notion of the social had remained a constant topic of conversation in the department in Manchester ever since. As a group we feel particularly indebted to Max Gluckman who has been the main inspiration in many direct and indirect ways to the studies that are presented here." (Mitchell, p. vi and v, 1969)

This close-knit network of academics provides an atmosphere in which ideas are developed to the full and carried to extremes by continual

reinforcement by colleagues. It is apparent that not all social anthropologists at Manchester share identical world views but such an environment encourages the adoption of ideas held by the group. In effect, it is possible to create a particular view of reality within such a cohesive group, and it seems that this has inevitably occurred. How far, the following ideas are held by all the Manchester social scientists is debatable, but they do seem to provide the hallmarks of a particular school of thought.

The essence of the mode of thought associated with Manchester is that there exists a 'hard' reality within which we exist and which can be analysed accurately and scientifically. A corollary of this belief is that empirical reality can be described and such descriptions can be judged - being better as it fits more closely with reality.

"Beliefs in magic and witchcraft help to distract attention from the real causes of natural misfortune. They also help to prevent men from seeing the real nature of conflicts between social allegiances. We can only hope that it may yet be possible to run society without any of this kind of distracting obscurity." (Gluckman, 1955, p.108)

Societies are also gradable on the criteria of how far they face up to 'reality' and do not retreat behind magic and so on. The individual's understanding of the situation is not seen to be particularly important, it is more essential to describe 'reality'. A curious mixture of emic and etic description tends to result.

Mitchell, for instance, writes:

"The underlying postulate of what follows is that the perceptions of city and country life will depend to some extent upon the social positions of the observers and that we can understand these images not so much as representations of reality but as reflections of the social positions of those who hold them."
 (1969, B, p.17)

In fact, the images are just as valid, and probably more interesting if they are seen as representations of reality. Such a view is not in accord with attempts to describe 'reality' however. Mitchell has written a statistically extremely competent study of images of town and country life. However, he categorises aspects of these life-styles in terms which he has picked up completely subjectively. Clearly this is inevitable but the fact that the shared limitations of the social scientist and those he observes ~~p~~ in that both derive their view of reality from interaction - are overlooked is a corollary of the search for a 'hard' reality.

Stemming from this is a view of ~~Western~~ science and the understanding of the social scientist as superior to non-~~Western~~ modes of thought and the world views of non-social scientists. Rebellions are seen as reaffirmations of the social order and so on.

Nadel has criticised such theories and pointed out that they owe their popularity to a desire to omit any considerations of explanation or consciousness.

"When we conceive of certain behaviour patterns as 'co-adaptive' and as recurrent or standardised, we mostly tacitly assume that they express aims - that they are intended to be whatever they are. This seems elementary; if I see people regularly celebrating funerals, or growing corn, or having wrestling matches, then surely I assume that they want to have funerals, or grow corn, or engage in wrestling. But often students of anthropology seem reluctant

to say so openly. They are quite prepared to look for ulterior aims or even for the ultimate social purpose in such activities; or they readily name basic organic needs and drives as the motivating force behind social action. But the reference to aims as it were, in the middle region, between ultimate social purpose and animal drive is viewed with suspicion; it seems to introduce an unwarranted explanatory element, as it also introduces the difficult and nowadays unfashionable category of consciousness." (Nadel, p.32, 1951) (my emphasis)

The social scientist is presumed by some Manchester anthropologists to be better able to understand the situation than the participants. ~~to be better able to understand the situation than the participants.~~

V.W. Turner writes:

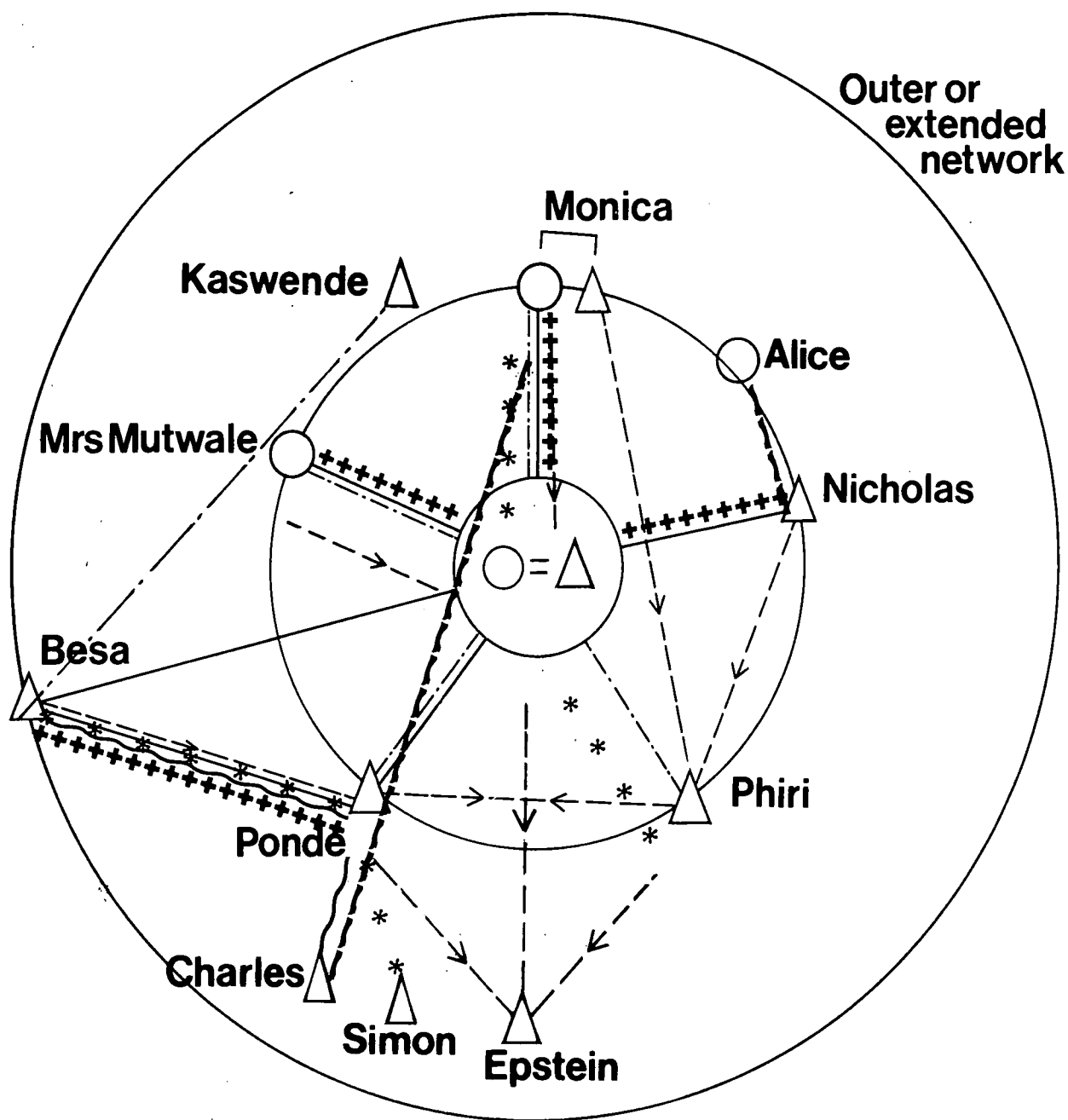
"How then can a social anthropologist justify his claim to be able to interpret a society's ritual symbols more deeply and comprehensively than the actors themselves?"

He answers that the use of particular field techniques and the observer's lack of bias allows this to happen:

"His [the actor's] vision is circumscribed by his occupation of a particular position or even a set of situationally conflicting positions ... Moreover the participant is likely to be governed in his actions by a number of interests, purposes, and sentiments, dependent upon his specific position, which impair his understanding of the total situation.

But the anthropologist ... has no particular bias and can observe the real interconnexions and conflicts between groups and persons." (1964, pp.28 and 29.)

In fact the anthropologist occupies a particularly bizarre position - he is obligated financially and morally to institutions and people in his own society, but he also has to interact with those he described. He is, therefore, also obligated and emotionally involved as are the actors. In fact the value of his information must vary proportionately with the affect of his interactions. To pretend that he is an impartial, unemotional recorder of fact is a gross distortion of the truth. It is a tenet of Methodological Dualism which enables such a view to be held.



- Same tribe or linguistic group
- - - - - Attended same school
- +++++ Attended same church
- ~~~~~ Neighbours
- - - - > Chain of gossip

* * * * * Pseudokinship

----- Adultery

Epsteins section of 'class network' (centred on Margaret)

A reanalysis from the ethnography

Fig.4

Mitchell, writing on the concept of tribe, says:

"The anthropologists construct of a 'tribe' in the sense of a definable cluster of cultural traits may have little significance to the people to whom it refers. The people concerned may not have access to the technical detail upon which the anthropologist legitimately, for his own purposes classifies the people into tribes." (1970, p.85)

The rejection of the actor's understanding and its replacement by that of the anthropologist's is not so easily justified in fact.

Manchester has seen the growth of a particular school of anthropology some of whose least attractive aspects I have mentioned above. In fact, the empiricism which is espoused has its positive side in that there is a richness of factual data in ethnographies from this school which is sometimes missing elsewhere. Their claims to present enough information for reanalysis of data are met to a greater extent than by more 'intuitive' anthropological studies - as my redrawing of Epstein's diagram shows. However, a great deal of the subtlety of meaning and interaction is lost by an adherence to a view of a 'hard' reality. The close-knit network which seems to exist at Manchester has enabled a view of reality which is aberrant, in the terms of the new paradigm prevailing in most academic disciplines, to prevail there.

APPENDIX II

"Strategy and Transaction in an African Factory' Bruce Kapferer
Manchester U.P. 1972

Since I finished writing, Bruce Kapferer's book - "Strategy and Transaction in an African Factory" - has appeared. I have mentioned his methods of quantification and the enormous problems of definition and measurement that they imply in an earlier chapter. There are other aspects of the book which illustrate most of my arguments.

In the introduction, which is written by J.C. Mitchell, it is pointed out that:

"Although in this book, Kapferer reports on the material he collected in one factory situation, it is apparent from his analysis that he had followed the protagonists in the events back into their places of residence and to their places of residence and to their places of recreation ... But this is only a fraction of the field work he managed to accomplish .. These (intensive) techniques of study required ... a very complete recording of inter-personal behaviour and conversation. This indefatigable recorder was able to accumulate a mass of extremely detailed observations ..." (1972, p.xi)

The network analysis is based on a far wider and deeper knowledge than is presented to the reader. Also the incredible amount of detail required is stressed, but the implication is that the anthropologist can act as a camera and record pure fact.

The level of detail is seen as of itself praiseworthy..

"studies of the kind Kapferer presents in this book require a meticulousness in recording, an assiduity and a discipline which few ordinary fieldworkers can attain." (p xi)

The "data are the observer's first level of abstraction from the totality of the situation. Since no field worker, however able and gifted is able to record everything that is going on some exchanges or some events have been either excluded or gone unnoticed" (xi)

The fieldworker seems to be aiming at simply recording everything, and then chooses to discuss interaction in one context only, although he has far wider information.

Mitchell again says (p.xiii) that the reader can check the analysis because "although it (the book) is essentially about the theory of personal interaction, it is very solidly grounded in actual events so that theory and data have an intimate relationship" (xiii).

Kapferer himself explains that he chose the particular factory because he already knew people there (xvii). He employed an African research assistant with whom he was able to check his observations. They both recorded their information on the spot as Kapferer found that this made people less suspicious. He was presented as a research student from the University of Zambia, a category of person which was originally devoid of meaning for the workers (xxi). Kapferer stresses ^{the} ~~that~~ fact that to be seen taking notes by the workers was an advantage in that this made him more acceptable to them. Beyond this he gives no details of how he interacted with the workers.

"The description I present is also intended as a general contribution to research in urban anthropology and sociology in developing countries." (p.2)

The distinction between anthropology and sociology is not seen as particularly important. The implication is that methods - such as network analysis / should be used in both disciplines.

The theories which Kapferer uses are 'decision theory, game theory, symbolic interactionism and the theory of social exchange". (p.4). The latter predominates. The emergence of social properties through transaction is a major theme of the book

"My first aim is to describe and explain what I recorded in the course of field observations." (p.8)

Kapferer then presents a description of the town and of the factory system. This is illustrated with statistical tables. The details on the factory are miniscule, and some seem to add little to the actual understanding of the social system (p.28-9). The varying number of hours worked is also explained. Prestige rankings are gained by administering a questionnaire to the factory employees. The mixture of emic and etic concepts appears here ... "many of my analytical points of reference in describing the factory context are also used by the factory workers, though often expressed in differing forms in their perception of their work place." (p.59). This confusion is most apparent in the definition and description of network links - as I pointed out in an earlier chapter.

The attempt to avoid the theoretical inputs to the description of the social composition of the factory is again emphasised. "The description ... does not derive from any preconception regarding what should be included in an adequate monographic analysis." (p.62). In fact it must rest on some preconceptions since otherwise apparently irrelevant factors such as height of workers for instance would be just as important for the description as age, which is considered in detail. ^{**} Kapferer is relying

** Height might well be relevant in prestige rankings - apparently all the Presidents of the United States have been taller than their defeated opponents.

upon his own commonsense to choose the variables which he includes in his analysis, but he refuses to admit this.

Kapferer then embarks/^{on}a series of occupational histories. He does not explain how he or his assistant gained access to this information.

In Chapter 4 he introduces the terms 'arena' and 'field' which, he says, "Both Bailey and Strauss used ...th in an attempt to overcome some of the limitations of conventional nomative structural/functional analysis" (p.121) The justification for these new approaches is that they supersede the old paradigm. The definitions which are given of 'arena' and 'field' are confusing and the distinction between emic and etic concepts is particularly blurred (p.122-123). The arena seems to be the hard reality, as perceived by the anthropologist while the perceptual field is the image the individual has of the resources at his disposal, and the action field is the activated resources.

A detailed description of disputes in the factory follows.

Chapter 5 on interaction patterns I have mentioned in my Chapter 5. The confusion of emic and etic becomes marked in this context. For instance, "... an individual can escape obligations incurred through transactions by simply not recognising that he is obligated." (p.166) It is not clear at all whether Kapferer means that the individual knows he is obligated and ignores that fact or whether he is not aware that he is obligated, in which case the question arises as to whom is aware that he is obligated?

In deciding which relationships are imbalanced (p.168) in that one partner contributes more than the other, it is also unclear whose opinion this is. It seems that it is Kapferer's based upon his observations. The actor's perceptions do not seem to be regarded as relevant. Problems such as these beset all the following data. In my experience simply establishing which language was used in interaction between different people in different contexts is almost impossible, and measures of multiplexity and so forth are far more complex. Ultimately we are presented with Kapferer's perception of the interaction which omits the meanings given to relationships by the actors.

In the final chapters (6 and 7), Kapferer is:

"concerned with the processes which lead and allow certain individuals to control the perceptions of and the behaviour of others, and with the processes which generate changes in their perceptions and related social activity. In pursuing these general aims I intend to develop and demonstrate the value of an approach which makes use of concepts directed towards the analysis of social behaviour as process. By doing so I depart from a tendency current in much anthropological and sociological analysis to treat social process through conceptual constructs which are better suited to the study of social statics, and which view process as a special and separate problem." (p.205)

The problem of change is a major element in prompting Kapferer to use ego-oriented approaches. In fact, he uses events to illustrate process rather than networks, although he analyses networks at two points in time.

The ability of the individual to control his social environment is stressed. However, he also upholds the superior ability of the anthropologist in understanding this environment. He adheres to the thesis of Methodological Dualism in fact.

"It is basic to my conception of social process that individuals are, in varying degrees, able to shape their own destinies and the destinies of others. Social structures and social systems as far as they are the analytical constructs of anthropologists and sociologists are also the creations, though by no means necessarily identical, of the individuals and groups these social scientists obscure. The constructs which individuals and groups make of their participation are as important and perhaps more so, in understanding why individuals behave as they do as are the constructs made by the social scientist. The latter often includes contextual components and relations between them which lie outside the comprehension, knowledge, and experience of the individual participant." (p.206)

One hundred pages of detailed records of events follow, which are summarised by analysed^{is} in four pages. The pursuit of power and status is the major focus of interest.

A postscript reiterates points I have already made - particularly that

"The major and important criticism of so-called structural-functional and institutionalist orientations rests in their failure adequately to explain social change." (p.336)

The choice of theories and conceptualisation "has been motivated above all else by a wish to present as accurately as possible the empirical reality I observed." (p.336) This type of empiricism is in marked contrast to the type of understanding which Ronald Laing (whom Kapferer quotes on pages 336-7) would seek.

It is impossible to empathise with the people Kapferer describes or with the anthropologist. The meaning of all interaction is subordinated to the desire to present an accurate view of 'empirical reality' and the use of particular concepts - the major one being network. The people

of the Narayan factory and the social life they lead are not available to the reader as experience by the use of these methods. It is hard to avoid concluding that ultimately all we are reading is Kapferer's projected commonsense understandings of social life.