base of the county has shifted from agriculture to industry as shown by occupational trends.

SUMMARY

Following the location of a major steel plant in a rural Utah county, thousands of new people came into the area to seek industrial employment and many more people living in the county migrated occupation-wise into industry. From previous studies in the field of labor mobility, a series of hypotheses were set up and tested to see if this situation showed trends in agreement with other such situations.

1. It was found in this study that the majority of industrial workers came from the local labor market within the county. Following this, workers migrated into the county from contiguous counties in the state. While most of the workers were from Utah, some were from out of state and, contrary to expectations, the majority of workers did not come from contiguous states. Evidently recruiting policies and other factors drew workers to Utah from more distant states than from adjoining states.

2. While it is generally true that it is the younger men who migrate, and this study indicated that only ten percent of immigrant workers were over 45, there was no direct inverse correlation between age and distance of migration. In this case instead of age decreasing as distance increased, there was a positive correlation between age and distance.

3. It was also hypothesized that labor turnover is a function of migratory tendencies, age, and education. It was found as expected that those workers with previous records of termination were most likely to terminate their employment and move on. Also as expected the younger workers had a higher termination record than older workers. In the case of education, three studies had found that the more educated were more likely to be occupationally mobile. This study found that the terminated workers had less education on the average than those who continued their employment.

4. As workers migrated into the industrial area, the trend was to seek residence on accessible roads to the work plant in communities close to the plant with adequate community services. This is in agreement with other studies. It was also evident that workers in the county formerly living in rural areas moved into closer urban communities as they obtained employment in the steel plant.

5. Within the rural county itself there was a marked shift in population composition from rural to urban and a decided change in occupational trends from agriculture to industry. We would expect now the trend of behavior in most activities in the county to be more consistent with urban than with rural life.

ROLES IN SOCIOLOGICAL FIELD OBSERVATIONS*

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BUFORD JUNKER has suggested four theoretically possible roles for sociologists conducting field work.[1] These range from the complete participant at one extreme to the complete observer at the other. Between these, but nearer the former, is the participant-as-observer; nearer the latter is the observer-as-participant. As a member of Junker's research team, I shared in the thinking which led to conceptualization of these research roles. After the work of the team was completed, I continued the search for insight regarding processes of interaction learning in field observation in a special study of my own.[2] A considerable portion of this study was devoted to exploration of the dimensions of Junker's role-conceptions and their controlling effects on the product of field study.

* Read before the nineteenth annual meeting of the Southern Sociological Society, Atlanta, Georgia, April 13, 1956.

[1] Buford Junker, "Some Suggestions for the Design of Field Work Learning Experiences," in Everett C. Hughes, et al, Cases on Field Work (hectographed by The University of Chicago, 1952), Part III-A.

[2] Raymond L. Gold, Toward a Social Interaction Methodology for Sociological Field Observation, unpublished Ph. D. dissertation, University of Chicago, 1954.

My aim in this paper is to present extensions of Junker's thinking growing out of systematic interviews with field workers whose experience had been cast in one or more of these patterns of researcher-subject relationship. All of these field workers had gathered data in natural or nonexperimental settings. I would like in this paper to analyze generic characteristics of Junker's four field observer roles and to call attention to the demands each one places on an observer, as a person and as a sociologist plying his trade.

Every field work role is at once a social interaction device for securing information for scientific purposes and a set of behaviors in which an observer's self is involved.[3] While playing a field work role and attempting to take the role of an informant, the field observer often attempts to master hitherto strange or only generally understood universes of discourse relating to many attitudes and behaviors. He continually introspects, raising endless questions about the informant and the developing field relationship, with a view to playing the field work role as successfully as possible. A sociological assumption here is that the more successful the field worker is in playing his role, the more successful he must be in taking the informant's role. Success in both role-taking and role-playing requires success in blending the demands of self-expression and self-integrity with the demands of the role.

It is axiomatic that a person who finds a role natural and congenial, and who acts convincingly in it, has in fact found how to balance role-demands with those of self. If need be he can subordinate self-demands in the interest of the role and role-demands in the interest of self whenever he perceives that either self or role is in any way threatened. If, while playing the role, someone with whom he is interacting attacks anything in which he has self-involvement, he can point out to himself that the best way to protect self at the moment is to subordinate (or defer) self-expression to allow successful performance in the role. In other words, he uses role to protect self. Also, when he perceives that he is performing inadequately in the role he can indicate to himself that he can do better by changing tactics. Here he uses self as a source of new behaviors to protect role. The case of using role to protect self from perceived threat is one of acute self-consciousness, a matter of diminishing over-sensitivity to self-demands by introspectively noting corresponding demands of role. The case of using self to protect role from perceived threat is one of acute role-consciousness, a matter of diminishing over-sensitivity to role-demands by introspectively indicating that they are disproportionately larger than those of self. Both cases represent situations in which role-demands and self-demands are out of balance with each other as a result of perceived threat, and are then restored to balance by appropriate introspection.

Yet, no matter how congenial the two sets of demands seem to be, a person who plays a role in greatly varied situations (and this is especially true of a sociologist field observer) sometimes experiences threats which markedly impair his effectiveness as an interactor in the situation. When attempting to assess informational products of field work, it is instructive to examine the field worker's role-taking and role-playing in situations of perceived, but unresolved, threat. Because he defines success in the role partly in terms of doing everything he can to remain in even threatening situations to secure desired information, he may find that persevering is sometimes more heroic than fruitful.

The situation may be one in which he finds the informant an almost intolerable bigot. The field worker decides to stick it out by attempting to subordinate self-demands to those of role. He succeeds to the extent of refraining from "telling off" the informant, but fails in that he is too self-conscious to play his role effectively. He may think of countless things he would like to say and do to the informant, all of which are dysfunctional to role-demands, since his role requires taking the role of the other as an informant, not as a bigot. At the extreme of nearly overwhelming self-consciousness, the field worker may still protect his role by getting out of the situation while the getting is good. Once out and in the company of understanding colleagues, he will finally be able to

[3] To simplify this presentation, I am assuming that the field worker is an experienced observer who has incorporated the role into his self-conceptions. Through this incorporation, he is self-involved in the role and feels that self is at stake in it. However, being experienced in the role, he can balance role-demands and self-demands in virtually all field situations, that is, all except those to be discussed shortly.

achieve self-expression (i.e., finally air his views of the informant) without damaging the field role.[4]

Should the situation be such that the field worker finds the informant practically inscrutable (i.e., a "bad" informant), he may decide to persevere despite inability to meet role-taking and role-playing demands. In this situation he becomes acutely role-conscious, since he is hypersensitive to role-demands, hyposensitive to self. This partial breakdown of his self-process thwarts his drawing on past experiences and current observations to raise meaningful questions and perceive meaningful answers. At the extreme, a role-conscious field worker may play his role so mechanically and unconvincingly that the informant, too, develops role-and-self problems.

The following discussion utilizes these conceptions of role and self to aid in analyzing field work roles as "master roles" for developing lesser role-relationships with informants.[5] While a field worker cannot be all things to all men, he routinely tries to fit himself into as many roles as he can, so long as playing them helps him to develop relationships with informants in his master role (i.e., participant-as-observer, etc.).

COMPLETE PARTICIPANT

The true identity and purpose of the complete participant in field research are not known to those whom he observes. He interacts with them as naturally as possible in whatever areas of their living interest him and are accessible to him as situations in which he can play, or learn to play, requisite day-to-day roles successfully. He may, for example, work in a factory to learn about inner-workings of informal groups. After gaining acceptance at least as a novice, he may be permitted to share not only in work activities and attitudes but also in the intimate life of the workers outside the factory.

Role-pretense is a basic theme in these activities. It matters little whether the complete participant in a factory situation has an upper-lower class background and perhaps some factory experience, or whether he has an upper-middle class background quite divorced from factory work and the norms of such workers. What really matters is that he knows that he is pretending to be a colleague. I mean to suggest by this that the crucial value as far as research yield is concerned lies more in the self-orientation of the complete participant than in his surface role-behaviors as he initiates his study. The complete participant realizes that he, and he alone, knows that he is in reality other than the person he pretends to be. He must pretend that his real self is represented by the role, or roles, he plays in and out of the factory situation in relationships with people who, to him, are but informants, and this implies an interactive construction that has deep ramifications. He must bind the mask of pretense to himself or stand the risk of exposure and research failure.

In effect, the complete participant operates continually under an additional set of situational demands. Situational role-and-self demands ordinarily tend to correspond closely. For this reason, even when a person is in the act of learning to play a role, he is likely to believe that pretending to have achieved this correspondence (i.e., fourflushing) will be unnecessary when he can actually "be himself" in the role. But the complete observer simply cannot "be himself"; to do so would almost invariably preclude successful pretense. At the very least, attempting to "be himself"—that is, to achieve self-realization in pretended roles—would arouse suspicion of the kind that would lead others to remain aloof in interacting with him. He must be sensitive to demands of self, of the observer role, and of the momentarily pretended role. Being sensitive to the set of demands accompanying role-pretense is a matter of being sensitive to a large variety of overt and covert mannerisms and other social cues representing the observer's pre-

[4] An inexperienced field worker might "explode" on the spot, feeling that role and self are not congenial in this *or any other* situation. But an experienced field worker would leave such a situation as gracefully as possible to protect the role, feeling that role and self are not congenial in *this* situation only.

[5] Lesser role-relationships include all achieved and ascribed roles which the field worker plays in the act of developing a field relationship with an informant. For example, he may become the "nice man that old ladies can't resist" as part of his over-all role-reportoire in a community study. Whether he deliberately sets out to achieve such relationships with old ladies or discovers that old ladies ascribe him "irresistible" characteristics, he is still a participant-as-observer who interacts with local old ladies as a "nice man." Were he not there to study the community, he might choose *not* to engage in this role-relationship, especially if being irresistible to old ladies is not helpful in whatever master role(s) brought him to town. (Cf. any experienced community researcher.)

tended self. Instead of being himself in the pretended role, all he can be is a "not self," in the sense of perceiving that his actions are meaningful in a contrived role.

The following illustration of the pretense of a complete participant comes from an interview with a field worker who drove a cab for many months to study big-city cab drivers. Here a field worker reveals how a pretended role fosters a heightened sense of self-awareness, an introspective attitude, because of the sheer necessity of indicating continually to himself that certain experiences are merely part of playing a pretended role. These indications serve as self-assurance that customers are not really treating *him* as they seem to do, since he is actually someone else, namely, a field worker.

> Well, I've noticed that the cab driver who *is* a cab driver acts differently than the part-time cab drivers, who don't think of themselves as real cab drivers. When somebody throws a slam at men who drive only part of the year, such as, "Well, you're just a goddamn cab driver!," they do one of two things. They may make it known to the guy that they are not a cab driver; they are something else. But as a rule, that doesn't work out, because the customer comes back with, "Well, if you're not a cab driver what the hell are you driving this cab for?" So, as a rule, they mostly just rationalize it to themselves by thinking, "Well, this is not my role or the real me. He just doesn't understand. Just consider the source and drop it." But a cab driver who *is* a cab driver, if you make a crack at him, such as, "You're just a goddamn cab driver!" he's going to take you out of the back seat and whip you.

Other complete participant roles may pose more or less of a challenge to the field worker than those mentioned above. Playing the role of potential convert to study a religious sect almost inevitably leads the field worker to feel not only that he has "taken" the people who belong to the sect, but that he has done it in ways which are difficult to justify. In short, he may suffer severe qualms about his mandate to get information in a role where he pretends to be a colleague in moral, as well as in other social, respects.

All complete participant roles have in common two potential problems; continuation in a pretended role ultimately leads the observer to reckon with one or the other. One, he may become so self-conscious about revealing his true self that he is handicapped when attempting to perform convincingly in the pretended role. Or two, he may "go native," incorporate the role into his self-conceptions and achieve self-expression in the role, but find he has so violated his observer role that it is almost impossible to report his findings. Consequently, the field worker needs cooling-off periods during and after complete participation, at which times he can "be himself" and look back on his field behavior dispassionately and sociologically.

While the complete participant role offers possibilities of learning about aspects of behavior that might otherwise escape a field observer, it places him in pretended roles which call for delicate balances between demands of role and self. A complete participant must continually remind himself that, above all, he is there as an observer: this is his primary role. If he succumbs to demands of the pretended role (or roles), or to demands of self-expression and self-integrity, he can no longer function as an observer. When he can defer self-expression no longer, he steps out of the pretended role to find opportunities for congenial interaction with those who are, in fact, colleagues.

PARTICIPANT-AS-OBSERVER

Although basically similar to the complete observer role, the participant-as-observer role differs significantly in that both field worker and informant are aware that theirs is a field relationship. This mutual awareness tends to minimize problems of role-pretending; yet, the role carries with it numerous opportunities for compartmentalizing mistakes and dilemmas which typically bedevil the complete participant.

Probably the most frequent use of this role is in community studies, where an observer develops relationships with informants through time, and where he is apt to spend more time and energy participating than observing. At times he observes formally, as in scheduled interview situations; and at other times he observes informally—when attending parties, for example. During early stages of his stay in the community, informants may be somewhat uneasy about him in both formal and informal situations, but their uneasiness is likely to disappear when they learn to trust him and he them.

But just when the research atmosphere seems ripe for gathering information, problems of role and self are apt to arise. Should field worker and informant begin to interact in much the same way as ordinary friends, they tend to jeopardize their field roles in at least two important ways. First,

the informant may become too identified with the field worker to continue functioning as merely an informant. In this event the informant becomes too much of an observer. Second, the field worker may over-identify with the informant and start to lose his research perspective by "going native." Should this occur the field worker may still continue going through the motions of observing, but he is only pretending.

Although the field worker in the participant-as-observer role strives to bring his relationship with the informant to the point of friendship, to the point of intimate form, it behooves him to retain sufficient elements of "the stranger" to avoid actually reaching intimate form. Simmel's distinction between intimate content and intimate form contains an implicit warning that the latter is inimical to field observation.[6] When content of interaction is intimate, secrets may be shared without either of the interactors feeling compelled to maintain the relationship for more than a short time. This is the interaction of sociological strangers. On the other hand, when form of interaction is intimate, continuation of the relationship (which is no longer merely a field relationship) may become more important to one or both of the interactors than continuation of the roles through which they initiated the relationship.

In general, the demands of pretense in this role, as in that of the complete participant, are continuing and great; for here the field worker is often defined by informants as more of a colleague than he feels capable of being. He tries to pretend that he is as much of a colleague as they seem to think he is, while searching to discover how to make the pretense appear natural and convincing. Whenever pretense becomes too challenging, the participant-as-observer leaves the field to re-clarify his self-conceptions and his role-relationships.

[6] "In other words, intimacy is not based on the *content* of the relationship.... Inversely, certain external situations or moods may move us to make very personal statements and confessions, usually reserved for our closest friends only, to relatively strange people. But in such cases we nevertheless feel that this 'intimate' *content* does not yet make the relation an intimate one. For in its basic significance, the whole relation to these people is based only on its general, unindividual ingredients. That 'intimate' content, although we have perhaps never revealed it before and thus limit it entirely to this particular relationship, does nevertheless not become the basis of its form, and thus leaves it outside the sphere of intimacy." K. H. Wolff (ed.), *The Sociology of Georg Simmel* (Glencoe, Illinois: The Free Press, 1950), p. 127.

OBSERVER-AS-PARTICIPANT

The observer-as-participant role is used in studies involving one-visit interviews. It calls for relatively more formal observation than either informal observation or participation of any kind. It also entails less risk of "going native" than either the complete participant role or the participant-as-observer role. However, because the observer-as-participant's contact with an informant is so brief, and perhaps superficial, he is more likely than the other two to misunderstand the informant, and to be misunderstood by him.

These misunderstandings contribute to a problem of self-expression that is almost unique to this role. To a field worker (as to other human beings), self-expression becomes a problem at any time he perceives he is threatened. Since he meets more varieties of people for shorter periods of time than either the complete participant or the participant-as-observer, the observer-as-participant inclines more to feel threatened. Brief relationships with numerous informants expose an observer-as-participant to many inadequately understood universes of discourse that he cannot take time to master. These frustratingly brief encounters with informants also contribute to mistaken perceptions which set up communication barriers the field worker may not even be aware of until too late. Continuing relationships with apparently threatening informants offer an opportunity to redefine them as more congenial partners in interaction, but such is not the fortune of a field worker in this role. Consequently, using his prerogative to break off relationships with threatening informants, an observer-as-participant, more easily than the other two, can leave the field almost at will to regain the kind of role-and-self balance that he, being who he is, must regain.

COMPLETE OBSERVER

The complete observer role entirely removes a field worker from social interaction with informants. Here a field worker attempts to observe people in ways which make it unnecessary for them to take him into account, for they do not know he is observing them or that, in some sense, they are serving as his informants. Of the four field work roles, this alone is almost never the dominant one. It is sometimes used as one of the subordinate roles employed to implement the dominant ones.

It is generally true that with increasingly more observation than participation, the chances of "going native" become smaller, although the possibility of ethnocentrism becomes greater. With respect to achieving rapport in a field relationship, ethnocentrism may be considered a logical opposite of "going native." Ethnocentrism occurs whenever a field worker cannot or will not interact meaningfully with an informant. He then seemingly or actually rejects the informant's views without ever getting to the point of understanding them. At the other extreme, a field worker who "goes native" passes the point of field rapport by literally accepting his informant's views as his own. Both are cases of pretending to be an observer, but for obviously opposite reasons. Because a complete observer remains entirely outside the observed interaction, he faces the greatest danger of misunderstanding the observed. For the same reason, his role carries the least chance of "going native."

The complete observer role is illustrated by systematic eavesdropping, or by reconnaissance of any kind of social setting as preparation for more intensive study in another field role. While watching the rest of the world roll by, a complete observer may feel comfortably detached, for he takes no self-risks, participates not one whit. Yet, there are many times when he wishes he could ask representatives of the observed world to qualify what they have said, or to answer other questions his observations of them have brought to mind. For some purposes, however, these very questions are important starting points for subsequent observations and interactions in appropriate roles. It is not surprising that reconnaissance is almost always a prelude to using the participant-as-observer role in community study. The field worker, feeling comfortably detached, can first "case" the town before committing himself to casing *by* the town.

CONCLUSIONS

Those of us who teach field work courses or supervise graduate students and others doing field observations have long been concerned with the kinds of interactional problems and processes discussed above. We find such common "mistakes" as that of the beginner who over-identifies with an informant simply because the person treats him compassionately after others have refused to grant him an interview. This limited, although very real, case of "going native" becomes much more understandable to the beginner when we have analyzed it for him sociologically. When he can begin utilizing theory of role and self to reflect on his own assets and shortcomings in the field, he will be well on the way to dealing meaningfully with problems of controlling *his* interactions with informants.

Beyond this level of control, sophistication in field observation requires manipulating informants to help them play their role effectively. Once a field worker learns that a field relationship in process of being structured creates role-and-self problems for informants that are remarkably similar to those he has experienced, he is in a position to offer informants whatever kinds of "reassurances" they need to fit into their role. Certainly a field worker has mastered his role only to the extent that he can help informants to master theirs. Learning this fact (and doing something about it!) will eliminate nearly all excuses about "bad" or "inept" informants, since, willy-nilly, an informant is likely to play his role only as fruitfully or as fruitlessly as a field worker plays his.[7]

Experienced field workers recognize limitations in their ability to develop relationships in various roles and situations. They have also discovered that they can maximize their take of information by selecting a field role which permits them to adjust their own role-repertories to research objectives. Objectively, a selected role is simply an expedient device for securing a given level of information. For instance, a complete participant obviously develops relationships and frames of reference which yield a somewhat different perspective of the subject matter than that which any of the other field work roles would yield. These subjective and objective factors come together in the fact that degree of success in securing the level of information which a field role makes available to a field worker is largely a matter of his skill in playing and taking roles.

Each of the four field work roles has been shown to offer advantages and disadvantages with respect

[7] In a recent article on interviewing, Theodore Caplow also recognizes the key role played by the field worker in structuring the field relationship. He concludes, "The quality and quantity of the information secured probably depend far more upon the competence of the interviewer than upon the respondent." "The Dynamics of Information Interviewing," *American Journal of Sociology*, LXII (September 1956), 169. Cf. also the studies by Junker and Gold, *op. cit.*

to both demands of role and self and level of information. No attempt has been made in this report to show how a sociological conception of field work roles can do more than provide lines of thought and action for dealing with problems and processes of field interaction. Obviously, however, a theory of role and self growing out of study of field interaction is in no sense limited to that area of human activity. Learning to take and play roles, although dramatized in the field, is essentially the same kind of social learning people engage in throughout life.

In any case, the foregoing discussion has suggested that a field worker selects and plays a role so that he, being who he is, can best study those aspects of society in which he is interested.

AN ANALYSIS OF THE VALIDITY OF HEALTH QUESTIONNAIRES*

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SOCIAL researchers have long recognized the importance of physical health as a determinant of an individual's attitudes and behavior.[1] Disease, physical disability, and mental disorder often set restrictive limits upon the individual's choice of activity and color his general outlook on life. Attempts to determine the extent of this influence, however, raise important methodological problems concerning the measurement of the health status of an individual. There are relatively limited opportunities when the social researcher has recourse to actual medical examination of his subjects; much more often he must rely upon the subject's own reports of his medical symptoms or his general health. The development and testing of reliable and valid health self-ratings, thus becomes an essential step in the progress of the social scientist's investigation of the role of health in human behavior.

The medical profession has also evidenced interest in recent years in the utility of questionnaires as aids to medical diagnosis. For example, various screening techniques have been developed to serve as aids in psychiatric diagnosis.[2] A method has been suggested whereby diseases may be matched with their respective sets of symptoms in the diagnosis of a wide range of diseases.[3] Hence, a preliminary appraisal of an individual's health based on questionnaire responses could be used as an aid to medical diagnosis. A questionnaire which may serve this purpose has been developed at the Cornell University Medical College.[4]

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[1] See, Gordon F. Streib, "Morale of the Retired," *Social Problems*, Vol. 3 (1956), pp. 270–276; Bernard Kutner *et al.*, *Five Hundred Over Sixty* (New York: Russell Sage Foundation, 1956), p. 128 ff. For an example of the importance of health as a variable in family adjustment see Earl L. Koos, *Families in Trouble* (New York: King's Crown Press, 1946), esp. p. 63.

[2] See, for example, H. J. Harris, "The Cornell Selectee Index: An Aid in Psychiatric Diagnosis," *Annals of the New York Academy of Science*, 46 (1946), pp. 593–605; J. Zubin *et al.*, "Retrospective Evaluation of Psychological Tests as Prognostic Instruments in Mental Disorders," *Journal of Personality* (1953), pp. 342–355.

[3] Robert S. Ledley, Logical Aid to Systematic Medical Diagnosis, unpublished paper presented at the Annual Meeting, Operations Research Society of America, May 10–11, 1956.

[4] Keeve Brodman, Albert J. Erdmann, Jr., Irving Lorge, Harold G. Wolff, and Todd H. Broadbent, "The Cornell Medical Index-Health Questionnaire As a Diagnostic Instrument," *Journal of the American Medical Association*, 5 (April, May, June 1951), pp. 152–157.