The Methodology of Organizational Diagnosis

The purpose of organizational diagnosis is to establish the widely shared understanding of a system and, based on that understanding, to determine whether change is desirable. By stating and then maintaining that the initial work in the client system is diagnosis, consultants provide clients with bases against which they can be held accountable. Organizational diagnosis is considered as a recursive process. The topics considered in this article include entry, data collection, and feedback. The methods described here are self-correcting. For client systems who wish to learn, this methodology provides the opportunity, if it is employed by consultants who have been thoroughly and appropriately trained.

Organizational diagnosis is a process based on behavioral science theory for publicly entering a human system, collecting valid data about human experiences with that system, and feeding that information back to the system to promote increased understanding of the system by its members. The purpose of organizational diagnosis is to establish a widely shared understanding of a system and, based on that understanding, to determine whether change is desirable (Alderfer, 1976).

Inevitably, the organizational diagnosis has a tendency to provoke change in a human system, but the perspective presented here distinguishes the aims of diagnosis from those of planned change. According to the present view, diagnosticians attempt to change an organization only as far as is necessary to accomplish the purpose of diagnosis. Otherwise they do not attempt to promote change, no matter how promising are the opportunities that seem to present themselves.

This stance regarding change during diagnosis combines an understanding of organizational behavior with a value position regarding effective professional work in applied behavioral science.¹ The work of organizational diagnosis may require the professional to work with the organization as a whole—including organization–environment relations, groups inside and outside the organization, and individuals whose lives are shaped by the organization and who in turn determine the nature of the organization. As a result, theory relevant to individuals, groups, and the organization as a whole is crucial to diagnostic work. Simply to survive, the professional must know how to develop and to maintain working relationships with the system and its major components. To complete the work of understanding a system, the professional must know what data to obtain, how to collect it, and how to feed it back to the system to promote understanding.

Because resistance to inquiry is a common human characteristic, diagnosticians are ill equipped if they cannot identify and work through resistances to their work. Therefore, without skills to effect change, diagnosticians' capacity to complete the diagnostic mission may be blocked by the very processes they are attempting to un-

¹ Other perspectives on diagnosing organizations may be found in Argyris (1970), Levinson (1972), Mahler (1974), and Nadler (1977).

derstand. On the other hand, normally occurring client resistance cannot become part of the consultants' justification for acting unilaterally and arbitrarily in the face of that resistance. Consultants who aspire to excellence in their diagnostic work can*not* achieve this goal without client cooperation.

By stating and then maintaining that the initial work with a client system is diagnosis, consultants provide clients with bases against which they (the consultants) can be held accountable. Consultants also provide a means for protecting themselves against excessive and unproductive demands by clients during diagnosis. This approach sets limits on how consultants will use their skills and knowledge during diagnosis and, in general, develops expectations about what consultants and clients can count on from one another during the diagnostic process.

Organizational Diagnosis as a Recursive Process

Organizational diagnosis proceeds in three orderly phases: entry, data collection, and feedback. These phases are well defined because there are a clearly observable beginning and end to each one. But the phases are also overlapping to a degree. The term *recursive* explains the nature of the overlap between each phase and the other two. Each phase has primary objectives, which determine the major thrust of the work in that phase, and secondary objectives, which relate the other two phases to whichever phase is being undertaken. Thus, there is some data collection and some feedback during entry, some entry and some feedback in data collection, and some entry and some data collection at feedback.

ENTRY

The primary objectives of entry are to determine which units of the system (individual, group, and organization) will participate in the diagnosis and to determine whether the client and consultant can reach agreement about their respective roles during data collection and feedback. Entry begins with the first encounter between client and consultant and ends with a decision between client and consultant stating whether they can work together to complete the diagnosis. Entry is also a time for data collection, as the consultant begins to learn about the client system through conversations, observations, and documents. The close of entry, whether the decision is to terminate or to proceed with the next phases, provides the client with some feedback about how the consultant views the system (Alderfer, 1968b).

People cannot be consultants to systems in which they are full-fledged members.

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All individuals have vested interests in their own organizations. Even if individuals did not press their own interests, other members of the system would be unable to accept a consultant relationship from a peer, and the complete insider would be rendered ineffective as a result. Being at least partial outsiders, therefore, is part of the equipment of the organizational consultants. Without this role element, they cannot function effectively. Internal consultants, for example, can work in parts of a larger system where they have not been or currently are not members. But they cannot consult to their own groups, and they generally have a great deal of difficulty with parts of the system where they have recently been members. Being an outsider, while necessary for diagnostic work, is also a problematic feature of the consultant's role. Because consultants are outsiders, they can easily be prevented from understanding crucial elements of the system. Therefore, the consultant must establish some type of liaison system to manage the relationship between the consultant and those elements of the system where diagnosis will take place. Depending on the nature of the system, the liaison system may be an individual, a series of individuals, or a group (Alderfer, 1977b).

Whatever the state of an organization's boundaries before the entry process begins, it becomes more permeable during the time when client and consultant are exploring whether a complete diagnosis should take place (Alderfer, 1976). Outsiders, at least temporarily, are granted access to the organization—an experience that inevitably generates threat for the organization and its members. Entry is like a natural experiment, providing consultants with an opportunity to observe how the system responds when its boundaries become more permeable.

As human beings themselves, consultants also experience the period of entry as a time of anxiety. In part this arises because the consultants are dealing with their potential acceptance or rejection by the client system. The more self-awareness and experience the consultants have, the less these feelings will interfere with their effectiveness during entry. In addition, the consultant will also experience the effects set off in the client system by the stress on the organization's boundaries. As an "authority" on organizational behavior from outside, the consultant is likely to be the target for feelings that organization members have for authority figures inside their system.

The paradox of entry is that although it provides one of the best opportunities to observe organizational dynamics, it does so under relatively poor conditions. Consultants' anxiety and their work of managing the client relationship to reach a decision about diagnosis interfere with their making the most out of the data available at entry. Nonetheless, entry generally tells the organization's story very well. As a working heuristic, it is useful to assume that the major dynamics are all observable at entry, if the consultant is able to perceive them.

The data available at entry can become the bases of working hypotheses for testing during data collection and feedback. As a matter of normal professional practice, it is useful to record systematically the hypotheses that are stimulated by entry events. This activity calls for the discipline of developing at least two hypotheses to explain each entry event deemed worthy of attention, an approach first advocated by Harry Stack Sullivan (1954) in connection with psychiatric interviews. Alternative hypotheses can be readily generated by changing levels of analysis (from individual, to group, to organization) and using concepts from each level to explain what is observed. Typically, later data collection shows how informative the entry events were. Often,

hypotheses that initially seemed to be competitive explanations each turn out to provide partial understanding of the phenomena observed.

An entry from which client and consultant agree to proceed with the diagnosis ends most effectively with an exchange of letters between client and consultant. The exchange of letters is confirmation of agreements reached earlier through face-to-face conversations. Usually the consultant takes the initiative to write the "contract" letter and asks the client to reply briefly in writing. When the client and consultant cannot reach agreement about how to proceed, the entry process ends sometime before the exchange of letters. Rarely are letters exchanged if there is not agreement to proceed with the diagnosis. It is generally good practice, however, to confirm with the client that the diagnosis will not occur and, if possible, to establish why this decision was taken (Berg, 1977; Lewicki & Alderfer, 1973).

The contract letter covers the major dimensions of data collection and feedback. By the end of entry, the consultant should be clear about which units will participate in the diagnosis and about which methods will be used to collect information. These understandings should be stated in the contract letter. It is generally better to be able to agree that all people who participate in the diagnosis will receive feedback. Respondents are more likely to participate energetically in data collection if they feel that they will be able to learn from the process. However, it is usually more difficult to know the design of the feedback sessions without systematic data.

At the close of entry, the consultant should have a reasonably well-developed idea of what will be necessary to understand the client system, although this knowledge will be incomplete and may require changes in the contract as greater knowledge of the system becomes available. The contract letter should acknowledge the likely limitations of the consultant's knowledge of the system at the close of entry and identify the possibility that the client or consultant may want to modify the contract as the diagnostic study unfolds.

A contract letter covering all the elements described above tells a perceptive client a lot about what the consultant has learned about the system during entry. The letter is written to establish publicly what the client and consultant have learned about how they will work together during the diagnosis. As such, it is a statement about the client organization, the consultant, and their interdependence during diagnosis. Indirectly, it is also the first form of systematic feedback the client receives from the consultant.

DATA COLLECTION

The primary objectives of data collection are systematically to gather valid information about the nature of the client system and to prepare an analysis of that data for delivery to the client during feedback. Data collection begins when the consultant prepares a methodology for eliciting information and contacts members of the client system to implement the methodology. Data collection ends when the consultant has analyzed the data and is prepared to feed back the results to the client. Each data collection episode begins by establishing the bases of the client–consultant relationship and, as such, is like entry. These unstructured events provide the organization. In the process of eliciting data from clients, the consultant becomes increasingly specific about the kinds of data that will be useful. The search for increasingly precise information indirectly tells the client what the consultant thinks is important and thereby serves as a type of feedback.

Whatever form of liaison system the consultant has developed during entry plays a key role during data collection. The liaison system assists the consultant in determining what data to collect, from whom to collect it, when to collect it, and how to collect it. An effective liaison system helps the consultant with access to parts of the system where data must be collected and aids the consultant in establishing credibility, so the data obtained will be maximally valid. To the degree that the liaison system is a microcosm of the system being studied, it will provide the consultant with samples of behavioral dynamics of the system. If the system or parts of the system resist the diagnostic process, the same process will be observable in the liaison system. Interventions with the liaison system to aid the diagnostic process will also have effects on the total system (Alderfer, 1976).

The consultant's understanding of the system should become increasingly precise as the diagnostic process proceeds. Hypotheses formed during entry provide the initial conceptual foundation for developing more systematic data collection procedures during the next phase of diagnosis. Data collection instruments, as well as degrees of intellectual understanding, can be ordered from less to more precision. It follows that consultants should choose their instruments to reflect the stage of understanding in their inquiry. According to this principle, less structured methods should be used in the early stages of the investigation and more structured methods should be employed in the later phases.

From entry to data collection to feedback, consultant actions influence the working relationship with the client. Because the consultant's effectiveness depends directly on the quality of the client-consultant relationship, every action should be taken with reflection on its likely effects on this relationship. Data collection methods surely have an impact on the client-consultant relationship. The selection and ordering of methods, therefore, should maximize the benefit and minimize the damage to this relationship. As it turns out, the ordering of methods to verify a consultant's growing precision in understanding the client system. Moreover, proceeding from less to more structured methods also tends to produce more valid data (Alderfer, 1968a; Alderfer & Brown, 1972).

Following from the preceding principles, the preferred ordering of methods during data collection is: (a) unstructured observation, including examination of documents offered by the client; (b) individual interviews; (c) group interviews, if they are used; (d) questionnaires, ideally with item content determined organically from the results of Steps a, b, and c; and (e) specific documents requested by the consultant, if necessary.

Unstructured observation places minimal demands on the client-consultant relationship, can be begun during entry, and should be maintained through all phases of the diagnosis. Individual interviews have a relationship-building quality if they are conducted competently and, as a result, are probably the most essential tool of any data collection. Group interviews should be used more selectively, depending on whether the growing understanding of the system suggests that even greater insight about the organization can be attained by having members of the system who occupy similar roles talk together about their common fate. Questionnaires place stress on the clientconsultant relationship; they tend to be impersonal, unilateral, and monotonous. As a result, they are used most effectively *after* more relationship-building techniques have been employed. Moreover, the development of an empathic questionnaire that speaks about organizational issues in the language of the organization tests more precisely evolving hypotheses about the system and produces more valid data than standardized instruments (Alderfer & Brown, 1972).

Soliciting any information beyond what is publicly available raises questions about confidentiality, which in turn has implications for the client-consultant relationship. Virtually all professions (e.g., law, medicine, clergy) have traditions of confidential relations between client and professional. Organizational consultation should be no different. Commitments to confidentiality that are maintained aid the development of trust between client and consultant. The consultant should take the initiative at all relevant data collection events to explain the nature of the confidentiality that applies and to answer questions that arise.

Archival information should be requested by the consultant only when necessary and only after there has been enough interaction to demonstrate the soundness of the client-consultant relationship. Understandings about confidentiality apply to archival information as well as to data collected by face-to-face methods. Archival information is not necessarily more or less valid than data from other sources; in highly politicized systems, it is as likely to have been "managed" to serve the interests of specific individuals or groups as any other data. But it does offer a source independent of the consultant and, for this reason, is desirable to have when it can provide further insight into topics relevant to the diagnosis.

Analyzing the data for feedback to the client system begins with the formation of hypotheses during entry. Further steps are taken as consultants develop their liaison system, decide on specific areas of inquiry for individual and group interviews, develop items for an empathic questionnaire, and seek certain archival information. In short, the data analysis process is well underway in advance of when this work becomes the primary task at the close of data collection; the *issues* around which feedback will focus have been (and should have been) determined by decisions during entry and data collection. At the time of analysis, however, consultants face a number of other decisions about presenting the content of their information to the client. Especially important are choices with regard to the use of theory, the mix of qualitative and quantitative information, and the order in which issues are presented.

The primary orientation of the present approach to diagnosis is to understand a system on its own terms inductively, rather than impose preconceived analyses or standardized instruments. Never the less, this article presents a "theory of method," which in turn is rooted in a substantive theory of organizational behavior.² In preparing data for feedback, consultants must decide how much emphasis to give to theoretical concepts for understanding the data. Under some circumstances client understanding may be enhanced by more extensive presentation of theory, and under other conditions client understanding may be aided more by emphasis on concrete elements of the data (Alderfer, 1976). Use of theory depends on whether understanding

 $^{^2}$ The substantive theoretical position is based on open systems theory and intergroup relations. See Rice (1969) and Alderfer (1976, 1977a) for an elaboration of these related theoretical positions. The space limitations of this article prohibit relating the methodological theory, which is presented here, to the substantive theory, which is not. It takes a well-developed understanding of intergroup and open systems theory and sophisticated skill in working with intergroup dynamics to execute the methods presented here.

will be aided by increasing or decreasing the number of explanations clients have for their experience with the system. Introduction of theory by consultants tends to *decrease* the number of explanations clients generate, and emphasis on concrete data tends to *increase* the number of points of view proposed by clients.

Qualitative and quantitative data have compensating advantages and disadvantages, some of which are similar to the effects of how theory is used. The more qualitative data are used, the more clients are encouraged to search for their own explanations, and the more quantitative data are used, the more the data themselves are likely to shape conclusions about the system. Quotations and unstructured observations add richness, complexity, and uniqueness to any feedback presentation. They typically evoke client involvement and set off search processes, as clients attempt to determine why anyone would say or do what is reported. Questions about the generality of unique comments arise, and the use of quantitative information often provides answers.

People also have *feelings* about data concerning human affairs. For some (e.g., English teachers in a New England boarding school), the idea that human experience could be quantified at all might be an anathema. For others (e.g., engineers in a manufacturing plant), quantification might be synonomous with the term *data*. In advance of preparing the analysis, the consultants will have an opportunity to learn the client culture about data. This understanding should influence the balance of quantitative and qualitative data used in feedback. Because the purpose of feedback is *not* to change the client culture about data, the balance of qualitative and quantitative information used in feedback should reflect the client culture.

The issues presented in feedback vary in the degree of conflict they are likely to evoke. Like the process of entry and the methods of data collection, the order in which issues are presented in feedback has an influence on the client-consultant relationship, and this order should be designed to enhance the mutuality between client and consultant. As a general principle, the more disturbing topics should be presented neither at the beginning nor at the end. The initial elements of feedback set the groundwork for the entire process and should have the effect of stabilizing the working relationship and building confidence for later, more difficult material. The final parts of feedback aim toward bringing closure to the experience and should allow the client to complete the work of coming to terms with the feedback. As a result, the more conflictful material should be covered during the middle phases of data presentation—after the start-up dynamics have subsided and before termination has begun.

At the close of data collection, the consultant has obtained and analyzed systematic data about the client system. Prior to the start of feedback, there is a period of reduced interaction between client and consultant while the consultant prepares the data for feedback. This period of reduced contact will place some strain on the client-consultant relationship because the client will be anxious to find out what the consultant has learned and may experience the reduced contact with the consultant as a deprivation. The role of the liaison system remains important during this time. Through that entity, the consultant can maintain contact with the organization, learn about new developments in the client system, and keep the client informed about progress with the data analysis. Perhaps most importantly, the liaison system can be a source of advice about the content and design of feedback. It is frequently desirable to conduct the first feedback with the liaison people, especially if they represent a microcosm of the entire system.

FEEDBACK

The primary objective of feedback is to promote increased understanding of the client system by its members. Feedback typically consists of a series of meetings between the consultant and client during which the consultant presents the data analysis and the parties discuss and interpret the data. In carrying out feedback, consultants "reenter" the system after having been away while they prepared the data analysis. Client reactions to the feedback and their behavior during meetings provide another source of data that may confirm or disconfirm the analyses provided in the feedback. Feedback also brings the diagnosis to completion and possibly prepares for a transition to planned change.

Effective feedback design relates the *content* of the feedback to the *process* by which the analysis is delivered to the client system. The content of feedback is the data analysis prepared at the close of the data collection phase. The process of feedback is the composition of feedback meetings (i.e., who is present with whom), the ordering of the meetings (i.e., which groups receive information first, which second, etc.), the behavior of the client system during feedback, and the behavior of the consultants within and between feedback meetings. The overall feedback design should bring together people who are interested in the information presented and should bring them together in a way that is most likely to promote learning from the experience. Feedback is probably the period of maximum anxiety during the entire diagnosis. All the work that the consultant has done (or has failed to do) to develop effective working relationships with the client system will come to fruition (or frustration) during feedback. If this work has been good enough, the system will be able to tolerate the tension of learning about itself.

The oldest and best known feedback design is built around the "family group" of supervisor and immediate subordinates (Bowers & Franklin, 1972; Likert, 1961). Conventionally structured organizations can be viewed as a series of interlocking family groups from top to bottom. When the content of the feedback pertains to issues found in family groups, then a feedback design should be built around these groups. However, the effectiveness of family group feedback depends heavily on the relationship between supervisor and subordinates. If that relationship is not strong enough to tolerate open disagreement without undermining the leader or punishing subordinates, then an alternative design should be used. The consultant may choose to work with the supervisor alone or to conduct a series of pairwise interventions with the supervisor and key subordinates in order to establish conditions for a full family group meeting.

If the feedback content pertains more to systemwide issues than to family group issues, if the organization is not conventionally structured, or if there are severely strained authority relations throughout the organization, then the feedback design should depart from the conventional family group model. The alternative design will be some version of the "peer group-intergroup" model (Alderfer & Holbrook, 1973). According to this design, people meet first in groups of peers, which have no formal hierarchical differences among members, to discuss data relevant to their common concerns. The second step in this process is for combinations of peer groups to meet in order to deal with data pertaining to the relationship between the groups. The second step in the peer group-intergroup process may involve bringing together groups that represent different hierarchical levels (e.g., branch managers and senior vice-

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presidents), different functions (e.g., production and marketing), or different identities (e.g., blacks and whites).

The effectiveness of the peer group-intergroup model depends on managing effectively the tendencies toward ethnocentrism that exist in all groups. Groups exhibiting ethnocentric patterns attribute primarily positive traits to their own group and mainly negative properties to other groups. If ethnocentric dynamics are set off by the feedback process, then the data and analysis will be rejected and little learning will occur. The primary means to guard against heightening ethnocentrism during feedback are to be sure that the peer groups address their internal conflicts during the first phase of the process (thereby reducing the likelihood that internal conflicts will be projected onto out-groups) and to restrict the discussion of external group relations until the intergroup meeting (when both groups will be able to share their perceptions of the relationship between the groups). A further step in managing these intergroup dynamics is to intervene in the interpersonal relationship between the leaders of the peer groups, whose behavior in the feedback sessions will have a significant impact on the degree of ethnocentrism demonstrated in the joint meeting.

Through entry and data collection, the consultant has been primarily *taking* from the client system. Entry gives permission to conduct the diagnosis, and data collection provides information and the hope of understanding. Feedback is the time for the consultant to be *giving* to the client system. At a minimum, the consultant offers a picture of the client system that is accurate and clear. If the diagnosis was undertaken with the expectation of planned change to follow, the feedback may include recommendations about how to proceed with next steps. If the diagnosis did not include the expectation of change, then recommendations are not appropriate. The feedback process should always leave the client system with some record of the consultant's analysis. This record may be as much as a written report of the diagnosis or as little as the charts used for presenting information during the feedback meetings. These materials, however elaborate, provide concrete evidence that the diagnosis has been completed and the contract fulfilled.

Conclusion

This methodology of organizational diagnosis calls for the consultant to be competent in the conventional use of social science tools (observation, interviews, and questionnaires) and to possess a sophisticated theory and the related behavioral skills to enter, collect, and feed back information to complex multigroup organizations. According to this approach, the consultant uses the techniques and theory of diagnosis to understand a client system on its own terms, not to impose preconceived methods or conclusions. Each step in the diagnosis depends on an effective working relationship between client and consultant. Every phase in the process builds on the work of preceding phases. If properly executed, the methods described here are self-correcting because each phase provides opportunities to discover and to alter limitations of the preceding phases. For client systems who wish to learn, this methodology provides the opportunity—if it is employed by consultants who have been thoroughly and appropriately trained.

REFERENCES

Alderfer, C. P. Comparison of questionnaire responses with and without preceding interviews.

Journal of Applied Psychology, 1968, 52, 335–340. (a)

- Alderfer, C. P. Organizational diagnosis from initial client reactions to a researcher. Human Organizations, 1968, 27, 260-265. (b)
- Alderfer, C. P. Boundary relations and organizational diagnosis. In H. Meltzer & F. R. Wickert (Eds.), *Humanizing organizational behavior*. Springfield, Ill.: Charles C Thomas, 1976.
- Alderfer, C. P. Groups and intergroups. In J. R. Hackman & J. L. Suttle (Eds.), *Improving life at work*. Santa Monica, Calif.: Goodyear, 1977. (a)
- Alderfer, C. P. Improving organizational communication through long-term intergroup intervention. Journal of Applied Behavioral Science, 1977, 13, 193-210. (b)
- Alderfer, C. P., & Brown, L. D. Designing an empathic questionnaire for organizational research. Journal of Applied Psychology, 1972, 56, 456-460.
- Alderfer, C. P., & Holbrook, J. A new design for survey feedback. Education and Urban Society, 1973, 5, 437-464.
- Argyris, C. Intervention theory and method. Reading, Mass.: Addison-Wesley, 1970.
- Berg, D. Failure at entry. In P. Mirvis & D. Berg (Eds.), Failures in organization development. New York: Wiley, 1977.
- Bowers, D. G., & Franklin, J. L. Survey-guided development: Using human resources measurement in organizational change. *Journal of Contemporary Business*, 1972, 1, 43-55.
- Levinson, H. Organizational diagnosis. Cambridge, Mass.: Harvard University Press, 1972.
- Lewicki, R. J., & Alderfer, C. P. The tensions between research and intervention in intergroup conflict. *Journal of Applied Behavioral Science*, 1973, *9*, 424-449.
- Likert, R. New patterns of management. New York: McGraw-Hill, 1961.
- Mahler, W. R. Diagnostic studies. Reading, Mass.: Addison-Wesley, 1974.
- Nadler, D. A. Feedback and organization development. Reading, Mass.: Addison-Wesley, 1977.
- Rice, A. K. Individual, group and intergroup processes. *Human Relations*, 1969, 22, 562-584.
- Sullivan, H. S. The psychiatric interview. New York: Norton, 1954.

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