



Ed. Stein

Organizational Psychology Then and Now: Some Observations

Edgar H. Schein

Professor Emeritus, MIT Sloan School of Management, Palo Alto, California 94304;
email: schein@comcast.net

Annu. Rev. Organ. Psychol. Organ. Behav. 2015.
2:1-19

First published online as a Review in Advance on
January 22, 2015

The *Annual Review of Organizational Psychology
and Organizational Behavior* is online at
orgpsych.annualreviews.org

This article's doi:
10.1146/annurev-orgpsych-032414-111449

Copyright © 2015 by Annual Reviews.
All rights reserved



Watch an interview with the author online

Keywords

organizational culture, organization development, experiential learning, task complexity

Abstract

A comparison is made between the field of organizational psychology as I saw it in 1965 and how I see it today. Many issues remain the same, but the field is more differentiated, fragmented, and individualized than ever, despite culture, especially national culture, having become a big topic. The field is much larger and has spawned a whole applied field of organization development and new methods of experiential learning. The biggest change has been the decline of work on group dynamics and group interventions reflecting Western cultures of individualism. At the same time, task complexity, interdependency, multiculturalism, social responsibility, and new forms of organization have become new challenges for consultants and researchers because they require relationship building, coordination, and group work.

INTRODUCTION AND FORMAT OF THIS ARTICLE

In 1964, I was approached by Roger Holloway, a senior editor for Prentice-Hall, to write a textbook on a new field that was emerging out of industrial psychology. Articles and books had been written about organizations and management, but the practitioners going into management and business schools continued to rely heavily on the research methods and findings of industrial psychology with its focus on individual selection, training, and development. Leadership was always an important topic, but it was defined in terms of the individual competencies and behaviors of formal leaders. Sociologists and applied anthropologists had written about organizations for some time, but psychologists only began to focus on organizations as they encountered more managers who brought up organizational issues and as group dynamics research began to evolve concepts useful to organizational analysis.

A major change occurred in the 1940s and 1950s with Kurt Lewin's founding of the Research Center for Group Dynamics at MIT in the mid-1940s and with the Tavistock Institute in London launching a series of what came to be called sociotechnical interventions in how work could be organized (summarized in Trist & Murray 1990, 1993). In the United States, the National Training Laboratories (NTL) Institute was founded by Lewin, along with Ken Benne, Ron Lippitt, and Lee Bradford at Bethel, Maine, and it was there that the T-group and experiential learning were invented (Bradford et al. 1964). Lewin trained a generation of group dynamics researchers who literally created the field. Offshoots of the Bethel programs arose in California under the leadership of such scholars as Robert Tannenbaum and John Weir. Experiential learning later migrated into the fields of action learning, as created originally by Reginald Revans (1980), and action science, as created by Chris Argyris and colleagues (1985).

In their classic coal mine and factory studies, the Tavistock Institute clinicians and researchers had shown how one must work with real systems, creating the important concept of sociotechnical systems as both a field of research and an intervention (reviewed by Trist & Murray 1990, 1993). Wilfred Bion (1961) and others at the Institute also had brought both theory and new methodology to the field of group dynamics, leading to the A.K. Rice workshops, which also focused on small-group and large-systems dynamics.

I had gone to Bethel in 1958 and become enamored of what came to be called the experiential approach to learning about groups and leadership. Although I had been thoroughly trained in experimental social psychology, I could not help being attracted to the learning approach of the NTL Institute in which one could see organizational phenomena play out before one's very eyes. As a social psychologist, I was already enamored of group phenomena, so it was not a big step to start to think about what an organization actually consists of. Because I had to teach budding managers and middle managers in my MIT classes, there was a real incentive to learn about organizations. In spite of that, I told Holloway that there was no way he could get me to review what had already become a pretty big field. He persisted and finally convinced me to just pull together a hundred or so pages of some of the major themes in the field. I was helped in this by drawing heavily on what applied anthropologists and field researchers had by then launched in industry with the Hawthorne studies (Homans 1950, Roethlisberger & Dickson 1939).

What I propose to do in this article is to revisit my 1965 book, *Organizational Psychology*, to provide some impressions of how this field has evolved. What has changed in the last 50 years, and what has not? My assessment is not based on a formal review of the field today, so I can claim only to give the reader the impressions I have developed through continuing to be active in research, teaching, and consulting. The reader should also know of my biases based on having become more of an organizational clinician and process consultant (Schein 1969, 1999) through the decades,

leading the Academy of Management to honor me with the Lifetime Achievement Award as Scholar Practitioner in 2009.

I believe strongly in empirical research but have to admit that much of what is done today in organization behavior departments in business and management schools has moved into a degree of quantitative abstraction that eludes me. After 60 years in this arena, I am convinced that we are still at a Darwinian stage of searching for constructs and variables worth studying and are still waiting for some Mendelian genius to organize the field for us. In other words, I still think that good observation, phenomenology, fieldwork, ethnography, and careful case analyses are more important than quantitative statistical hypothesis testing. Clinical analyses of cases come naturally from our work as consultants and interveners, which led me to propose clinical research as an important method in our field (Schein 1987, 2001). I believe that good theory is still to be discovered by careful observation and analysis. Having offered my apology, I can move on to what I see today and how it jibes with the field as it was in 1965.

WHAT'S NEW? EXPERIENTIAL LEARNING, ORGANIZATION DEVELOPMENT, INDIVIDUALIZATION, AND FRAGMENTATION

In 1965 I wrote, "The material covered in this book will reflect the general historical trend from an individual-oriented industrial psychology toward a group-and-systems-oriented organizational psychology" (Schein 1965, p. 5). Were I to write a fourth edition of that book (the third and last edition was written in 1980), I would not change that sentence, but I would add that some segments of the field have benefited greatly from the influx of concepts from interpersonal and organizational sociology and from anthropology. However, I see those influences waning dramatically, as reflected in the fragmentation of the field into many subspecialties that are still driven by traditional psychological research methods and the virtual disappearance of group dynamics as a field of study both in its own right and as a key variable for the study of organizational dynamics.

The research focus has shifted away from groups, but in the applied area, as noted above, the invention and evolution of experiential learning in the T-group at the Bethel labs created organization development (OD) as a field of practice. The critical change was the acceptance of the reality that when one is dealing with human systems, one cannot isolate experimental subjects and do double-blind studies. Instead, our empirical methods had to allow for the involvement of the subjects, whether as students, clients, or pure research subjects, in the activity itself. In the classroom, we began to involve students more in experiential activities. In consulting, I found the need to invent process consultation, which hinged on involving the client in the definition and solution of organizational problems rather than merely doing a diagnosis and offering recommendations (Schein 1969, 1999).

To me, the most striking things about OD are its growth and proliferation as an applied field and the almost complete absence of teaching and research in this field in the major business schools. Instead, the path into OD has been through assorted master's level courses and PhDs or PsyDs offered by a few universities, such as Case Western Reserve, Columbia, American, Benedictine, and Pepperdine, and independent part-time programs, such as Alliant International, Walden, Capella, and Fielding Graduate Institute. However, the national OD Network and many regional networks run programs attended by large numbers of internal and external OD consultants, which suggests that organizations have adopted this form of help to a considerable degree.

Although the name OD implies a single field, it, as well as organization studies in general, shows the same fragmentation that Warren Bennis, Richard Beckhard, and I saw when in 1969 we launched the Addison-Wesley Series on Organization Development with six books rather than one

textbook. Over the years, we ended up with more than 30 titles representing various aspects of the theory and practice of OD. What I have seen when attending some of the regional OD Network meetings is a proliferation of tools, in the form of surveys, models, structured interventions, and short texts, with quick analyses and recommendations for how to improve some aspect of business. I contributed to this form of evolution with my short books on *Process Consultation* (Schein 1969, 1999), *Helping* (Schein 2009), and *Humble Inquiry* (Schein 2013). Books on team building were always popular and sold well, but as I mentioned above, team building fit in more as a tool than as an application of deeper studies of group dynamics and the role of groups in organizational systems. Within OD, there is a growing division between what Bushe & Marshak (2014) are calling diagnostic OD that emphasizes the use of tools to help solve organizational problems and dialogic OD that emphasizes helping leaders to adapt to basically unsolvable problems.

Further fragmentation of organization studies into more specific issues is best illustrated by the table of contents of this volume. Most of the topics listed would not have been recognizable in 1965, and most of them reflect the trend toward individualization that I am seeing and comment on further, below. It is, of course, necessary and probably inevitable that fields become specialized around topics of interest and that each field creates its own organizational/occupational culture and identity. But as each field grows and develops its own methods, the possibility of creating integrative theory becomes more and more difficult. I cannot even imagine how many pages I would have to read to catch up with even a few of the fields represented in this volume of the *Annual Review of Organizational Psychology and Organizational Behavior*.

I wonder to what extent we recognize that we are building a field that consists of many sub-cultures each with its own jargon and preferred research methods and each evolving an intellectual silo disconnected from either central theory and/or other silos. Given what I have learned about the difficulties of integrating cultures, I wonder whether there is any longer an industrial and organizational (IO) psychology field as such. This fragmentation has also occurred in the Academy of Management and in the American Psychological Association and is making it harder and harder to know what, in fact, is actionable knowledge about organizational life.

As I reflect back on the 1960s and 1970s, researchers and practitioners interested in organizational phenomena were divided into several different camps. One group opted for formal research in the university and pursued organizational issues primarily through the study of the individual characteristics of managers, leaders, and employees. Another group, the members of which have come to be called scholar/practitioners, was itself divided between applied researchers, who remained in the university but wanted to really understand the determinants of good and bad leadership and who combined their research with consulting, and trained practitioners, who chose to work primarily as consultants and learned about organizations directly through their consulting experience. The trained practitioners would now call themselves organizational development practitioners. I emphasize the distinctions because these two latter groups overlap minimally and neither has much connection to the formal researchers who remained in academia full time. Several major university business schools have a research unit doing traditional organizational research and, running in parallel, a leadership development unit with a separate staff trained in experiential learning methods that provides specific leadership training to all MBA students. They coexist, but they do not seem to influence each other's agendas, a point worth mentioning because in the larger field in the United States, I do not see much connection between what the OD community works on and what the academic researchers of today are working on.

This separation creates a dilemma for the scholar practitioner in that the ethics governing intervention often work at cross-purposes with the requirements of research. I have found many field researchers or survey researchers designing their studies to maximize the validity of the data without giving any thought to the impact on the organization of being observed, interviewed, and

surveyed. At the same time, I have observed consultants misquoting or exaggerating research findings to bolster their interventions. Both sides will have to learn: The researchers will have to become much more willing to compromise their methodology in order to minimize harm and acknowledge the fact that the research is itself an intervention; the interventionist will have to learn when and how to use research results and, if there are none to quote, rely on his or her own experience to provide benchmarks if those are needed. Of course, if we take organizational culture seriously, then interventionists should discourage benchmarking or other judgments of what is good and bad and instead help clients to make those judgments themselves in terms of their own improvement goals and cultural values.

On the conceptual level, I see much less creative theorizing of the kind that characterized both the Hawthorne and the Tavistock studies. There is much talk of systems and complexity theories and methods, but I don't see teams of researchers joining together to plan and execute a systemic analysis of an entire organization or even some unit of it. We teach team building to managers, but in academia, we don't practice it much because we have totally individualized the promotion and tenure process for young academics, reflecting especially the pragmatic individualism of US culture (Schein 2013). I was told that in one major business school, the research in social psychology has become a study of the impact on individual brain functions of doing tasks under different social conditions. Our ability to track what we do and feel with brain imaging will revolutionize our understanding of individual behavior, but I don't yet see how that will help us to understand organizations better.

THE GROWTH AND DECLINE OF GROUP DYNAMICS

In the years following Lewin's founding of the MIT Research Center for Group Dynamics in the mid-1940s, the study of groups and group dynamics flourished (Lewin 1947). However, in the last several decades, it has all but disappeared as a major research area. In a 2008 review of the state of research in IO psychology, research on teams was only 1 category among 15 other research areas (Cascio & Aguinis 2008). Theories like those of Bion that dealt with the group as a group have not taken hold. A prominent West Coast psychiatrist told me recently that group therapists are increasingly hard to find. How true this is statistically I have no way of knowing, but the observation correlates with my own observation that in the practice of organization development, team building has declined as a central focus of work from its originally central position, even as some researchers have shown the growing necessity for teams learning together (teaming) as tasks become more complex (e.g., Edmondson 2012).

I have always wondered whether our earlier preoccupation with teams was a reflection not of their importance but of the fact that we were culturally not very good at teaming. The jokes and complaints about committees and meetings, the headlines that tout teamwork in sports but always feature the quarterback or star performer, and the obsession with individual accountability and reward systems all suggest that what is driving our attention are the deep cultural assumptions that, in the end, (a) it is the individual who makes the difference and (b) getting the job done is much more important than relationship building and teamwork (Schein 2013). In other words, maybe in our Western individualized society, we prefer individualized treatment, even as patients in the hospital or in psychiatric treatment, except when the group is absolutely necessary and integral to the therapeutic process, as in Alcoholics Anonymous, or when the task requires collaboration.

In any case, groups don't go away; they are the critical units of organizations and of society. So I find it paradoxical that we focus so little these days on groups as objects of research while talking of systems models and the interdependency of everything. In this regard, I think it important to note that my 1965 book took a systems point of view toward the field, drawing on the biological models

of systems and the systemic interdependencies that were being actively explored in the field of family therapy. Current views of systems analysis seem to derive more from the work of Jay Forrester (1971) and focus on temporal and sequential interdependencies, whereas the early models drew more attention to the simultaneous interdependencies of biological and family systems.

Although it may not matter at a theoretical level, the more interventionist focus of the practice of OD makes it necessary to be very clear about what kind of interdependency we are analyzing if we are to help organizations improve. So, for example, at the small-group level, new concepts of group learning are emerging (Edmondson 2012), and at the organizational level, there is an active group of OD specialists who have written about and done work on what has come to be called large-systems change (e.g., Bunker & Alban 1997). However, it is my perception that both of these trends are small relative to individual coaching and leadership training in the totality of what OD practitioners are working on.

My own experience tells me that the understanding of group dynamics is still central to our field and that there is not enough emphasis placed on it. I had the good fortune of consulting with one company for more than 25 years, which enabled me to get a sense of not only the whole organization but also how it grew and evolved with time, age, success, and ultimate failure (Schein 2003). Much of what I observed as an organizational clinician at Digital Equipment Corporation (DEC) is very pertinent to understanding some of the core group processes that occur in organizations. DEC made most of its key decisions in various kinds of group meetings, and some of my most important interventions as a consultant were questions, comments, and suggestions that directly influenced the total group process. The ultimate demise of this organization after 25 years of success could almost be predicted from observing how the intergroup politics outside the core executive group replaced the decision-making power of the executive committee. The popular explanations of this organization's economic failure all emphasized failure of the CEO to see the market shift or failure of the company to adjust its strategy to changing market conditions. There was little understanding of how the group dynamics occurring inside the company were the real determinants of those strategic and executive failures.

If we look at DEC's organizational dynamics, we discover that intergroup issues surfaced with the growth of powerful subgroups, or silos, which not only varied in their internal group effectiveness but, more importantly, emerged as potential competitors. The cultural assumptions of Western economic theories emphasize competition but are quite unclear on whether internal intergroup competition should also be encouraged. This appears to be a fundamentally unresolved issue in the economics of capitalism even at the organizational level or we would not need antitrust laws and level playing fields. We believe that salespeople in the same organization should compete to meet their quotas, but we don't like it when they end up competing for the same customers. We have not resolved whether it is better in general for groups to compete or to collaborate.

We believe and have demonstrated over and over again with research in sports and in other activities that competition increases motivation. Group members work harder when competing, and we build our capitalist theory on this premise. We accept this premise at the level of organizations, but how true is it at the level of groups and units within an organization? The classic studies of Lewin (1947) and Sherif & Sherif (1969) showed us that competition can become destructive very rapidly and that putting competing groups together only seems to work when some larger common enemy is identified. Inside competing groups, we see not only higher motivation but also more autocracy, conformity pressures, and distorted perceptions of ingroup strengths and competitor weaknesses.

The powerful reality of this cooperation-competition dilemma was demonstrated in my study of DEC, where the early innovative years were built on strong incentives to compete individually

and between product groups. Ken Olsen, the founder, often created or allowed project groups to work competitively to see which one would come up with the best products. This worked fantastically well when both the individuals and the groups were young and small, and when computer technology was simpler. As the organization became more successful and grew over the first 20 or so years, I observed the emergence of the following pathological phenomenon. The top managers were more or less the same people over this entire period, but their behavior in the executive committee changed in a subtle way that even they might not have noticed or admitted.

When they were young electrical engineers with academic values, they engaged in lively debates to see which ideas really were sound enough to be pursued. Pure reason was king. Twenty or more years later, these same individuals in the same executive committee continued to argue vehemently for their positions, but I now noticed that they were each bending their logic and their arguments to protect their separate empires, which also made it less likely that they could hear logic from others. The competition had shifted from who had the best ideas and projects to how well each executive could argue in order to protect his turf and his people. If you lost the argument, your division might have to let lots of people go, and who could allow that? Valiant efforts were made to get the major groups to collaborate because the technology was getting more complex and required more collaboration, but the deep incentives were not there, and neither the board nor the CEO/founder could at that time focus the company by shutting down two of the three competing groups. The culture of DEC was so entrenched around the values of innovation and growth that the company was willing to gamble that all three groups could succeed and it could grow its way out of financial difficulty.

The point of my telling this story is that there is not much longitudinal research going on in our field, yet the important group and organizational dynamics that drive systems cannot really be understood until more of such research is done. One thought that comes from my observations about culture is that the key variable in organization studies may turn out to be occupational cultures, based on the occupational backgrounds of the key technologists and managers that run a given organization. For example, when Hewlett-Packard started as an instrumentation company, the kinds of engineers that drove the organization were expert at instrumentation. When the company decided to go into computing and acquired a large number of electrical engineers from the computing occupation, it found that it had to divide and spin off Agilent to preserve the original set of talents and attitudes. When Apple hired John Sculley to bring a consumer-marketing focus to the company and subsequently fired Steve Jobs, it did not count on the fact that Sculley never got the respect of the technical community. This lack of respect resulted in Sculley's departure and the eventual return of Jobs, who evidently was more in touch with both product marketing and technology, leading to Apple beginning to thrive again.

Cultural compatibility has been well recognized as being critical to successful acquisitions and mergers, but not enough attention has been paid to functional subculture compatibility based on the occupational cultures of the employees in the subcultures. What remains unresolved is how to align and, when needed, integrate the approaches of different occupational cultures. In health care today, the successful organizational changes involve the alignment of the subcultural assumptions of the doctors, administrators, nurses, and technologists (Kornacki & Silversin 2012). These changes all involve a deep understanding of group dynamics as well.

LEADERSHIP THEN AND NOW

I would like to believe that various kinds of experiences and decades of academic research would expand our knowledge base. So it is sometimes a bit of a shock to see how much we thought we already knew 50 years ago and how little our conclusions have changed in the field of social/

organizational psychology since then. In my book *Organizational Psychology* (Schein 1965, pp. 105–6), I reviewed the literature up to that point and stated my conclusions about leadership as follows:

Finally, let us look at a variable which has been implicit throughout, but has not been explicitly treated—the variable of *leadership*. Much has been written on leadership and it is beyond the scope of this discussion to review even cursorily the mass of research findings and theoretical positions that have been published. Two points are worth noting, however.

First, leadership is a *function* in the organization, rather than the trait of an individual. It is *distributed among the members of a group or organization*, and is not automatically vested in the chairman or the person with the formal authority. Good leadership and good membership therefore blend into each other in an effective organization. It is just as much the task of a member to help the group reach its goals as it is the task of the formal leader.

Second, leadership has a unique obligation to manage the relationships between a system and its environment, particularly in reference to the key functions of setting goals for the organization and defining the values or norms in terms of which the organization must basically develop a sense of identity. This function must be fulfilled by those members who are in contact with the organization-environment boundary and who have the power to set policy for the organization. This leadership function, which usually falls to the top executives of organizations, is critical. If the organization does not have clear goals and cannot develop a sense of identity, there is nothing to be committed to and nothing to communicate. At the same time, no organization need have its goals and identity *imposed* by its top executives. There is no reason why the organization cannot develop its goals and identity collaboratively and participatively, engaging every member down to the lowest echelons. What the top executives must do is to insure that goals are set somehow, but they may choose a variety of ways of allowing this to occur. (Emphasis in original)

I don't think I can say it any better today if I were summarizing that field. Unfortunately, from my point of view, leadership has been grabbed by both researchers and practitioners mostly as an individual characteristic. There are clearly voices heard in support of distributed leadership and leadership as a relationship, but most of the field is obsessively trying to identify just what personal characteristics can distinguish a leader from the rest of humanity. Tim Hall and I did some research on teachers that actually pertains to this topic in that we found that there were three types of teachers from whom students claimed they learned a great deal (Schein & Hall 1967). These three characteristics turn out to be a pretty good typology for leaders as well.

One class of teachers (leaders) derived their influence from their total command of a subject matter and their demonstrated competence. We like leaders who know what they are doing. A second class of teachers (leaders) derived their influence from what we labeled supportiveness. Leaders of this type cared about their students, helped them to learn, and treated them as human beings. This description sounds like the servant leader that surfaced first in the 1970s with an influential book by Robert Greenleaf (1977) and reflects the humanistic tradition. These leaders care about their organizations and their employees and are the target of debate among OD practitioners with respect to how important emotional intelligence (EI) is for leadership, assuming we had a clear definition of EI. Do leaders need to have empathy and compassion; if they don't have it, can it be learned or simulated?

The third class of teachers (leaders) has what was identified long ago as charisma. Such a leader exudes a level of confidence and emotional potency that gives students (subordinates) a blind confidence to agree and go along with whatever the leader wants. As far as I can tell, we still don't

have a definitive analysis, in terms of traits or personality, of what charisma is, but we know it when we see it, and we then analyze it retrospectively. Unfortunately, we have not learned how to predict it or identify it in individuals before they become leaders.

Because there are many kinds of leaders and because research has shown consistently that different kinds of leadership are needed for different kinds of tasks, the field has settled for a contingency theory: The desired characteristics of a leader depend on the task, the circumstances, and the nature of the subordinates. But this conclusion has not slowed down the continuing mass of books on leadership and what it should really be. Back in the 1950s, we said with great wisdom that leadership is a distributed function in a group, that it rotates among the members, and that it fulfills the missing functions in a group. Today, we still talk about distributed leadership, but we do so with less emphasis on group dynamics and more focus on the individualistic models of leaders.

THE LEADERSHIP/CULTURE INTERACTION

I discovered another important element of leadership not by studying it directly but by observing in my consulting activities how intertwined leadership is with organizational culture, leading me to make the radical suggestion that the only thing that truly distinguishes leadership from management is the creation and management of culture (Schein 1985). The importance of leadership in relation to culture has been widely accepted but often misapplied because of a lack of understanding of culture. When I said in 1965 that a leader must define values and norms, I was referring to culture. Defining values and norms, turning these into shared rules for behavior, is de facto creating and managing culture.

I was sensitive to culture in the grander sense because of my own childhood in Switzerland, the Soviet Union, and Czechoslovakia and, at age 10, coming to the United States and learning a new culture in Chicago public schools. What eventually got me started on studying and writing about organizational and occupational cultures was my consulting experience with dramatically different kinds of organizations that performed equally well or poorly. What was striking to me was cultural variation on key dimensions such as assumptions about authority and the bases of trust. Even within a seemingly homogeneous occupation like engineering, I was struck by how different computer companies were from chemical companies because of the underlying technologies that spawned engineers with very different worldviews, concepts of time, approaches to experimentation, and so on. For example, the easy fooling around with circuits that DEC engineers reveled in would have been career suicide in the chemical environment of Ciba-Geigy, my other major client at the time.

Yet these obvious differences in technologies and the resulting occupations that work with those technologies are blithely ignored by survey-driven culture researchers searching for a few dimensions and easy interventions to produce what they call culture change. If I have learned anything in this field, it is that cultures as a whole don't change; they evolve slowly as bits and pieces of them are changed by systematic change interventions. And these interventions work only when the culture changes are clearly tied to the fixing of some organizational problems linked to performance. There are no better or worse, good or bad, cultures except in relation to how an existing culture enables an organization to perform in its given environment.

We have accepted the importance of culture in determining behavior. However, we are still treating it too simplistically in that we don't have good models to show how national and ethnic cultural values, norms, and rules get integrated into the values, norms, and rules of the occupations we enter, and are then further shaped by the organizations and groups in which we spend the bulk of our time. Culture as a multilayered concept reflecting different reference groups is often oversimplified in practice, just as personality as a multilayered concept of multiple selves learned

in the various socialization settings we have experienced is often misunderstood. Organizational research and consulting practice still seem obsessed with reducing interactive phenomena into individual traits such as EI.

In summary, culture appears to be a popular concept because it does capture the whole of a system, but it will be some time before we have a common set of definitions and insights into what it means to describe and work with such a holistic concept. Interventions claiming to effect culture change are very popular in OD right now, but many of them are not really changing culture at all if we adhere to the more anthropologically correct holistic definition. For example, right now there is a growing fad of surveying employees in order to discover how to engage them better, and this is called culture change. Although such a program charges forward at the behavioral level, there is great danger that it will ignore deeper assumptions about employability, which would totally undermine it.

MOTIVATION AND ASSUMPTIONS ABOUT HUMAN NATURE

In 1965, I reviewed the historical evolution of the concept of human nature as it moved from people being seen as rational economic, to social, to self-actualizing, and, ultimately, to complex and variable. My perception is that we still hold all four of these models of humanness and use whichever one fits best what we are trying to explain at the moment. A business school student will learn in her organizational behavior class that humans are complex, and in the next period in the finance class, she will learn that they are rational economic. We have also discovered that cultures differ even in how they define humanity and, to our dismay, even in what they consider acceptable treatment of others, as seen in the UN Human Rights Committee's struggle to find common ground on what constitutes a violation of human rights.

Another way of analyzing this humanism—thinking of employees as whole human beings—was strongly advocated by Abe Maslow, Douglas McGregor, and others and became one of the value underpinnings of OD theory. However, the strongest empirical countertrend to finding a simple holistic model of humanness would seem to be our increasing recognition of and emphasis on diversity, which is fed by the growing cultural variation within the United States. Seeing subway signs in Boston in both English and Spanish and in Seattle in both English and Japanese says a great deal about what we assume human nature encompasses. Treating Japanese employees as whole human beings may be different on some important dimensions from treating Mexican employees as whole human beings.

The obsession with standardization fed by our strong pragmatism creates special problems in this area, as was illustrated in the 1980s when a major aerospace company in the US Southwest was required to abandon all of its very progressive policies of flexible working hours and favorable work-family norms because another company was found to have cheated on reporting hours of work, causing all US contractors to be required to institute time clocks and very tight working hours. Suddenly, the very same workers in the aerospace organization were viewed as untrustworthy and lazy, necessitating tight supervision and the firing of family members because of new rules of nepotism. McGregor would have pointed out that within a few years, these employees would indeed become untrustworthy and lazy because all the managerial systems expected them to be!

There is a certain irony that we alienate employees and then spend a lot of effort with surveys and consultants to figure out how to engage them. My residual question in the context of the US culture is, Even with our pragmatism and task orientation, why is it so hard for managers to accept their employees as total persons? Perhaps the answer is in the shifting psychological contract.

THE SHIFTING PSYCHOLOGICAL CONTRACT

To capture the reality of individual–organization relationships, I found it useful in 1965 to introduce Argyris’s (1964) explication of the psychological contract:

Ultimately the relationship between the individual and the organization is interactive, unfolding through mutual influence and mutual bargaining to establish a workable psychological contract. We cannot understand the psychological dynamics if we look only to the individual’s motivations or only to organizational conditions or practices. The two interact in a complex fashion, requiring us to develop theories and research approaches which can deal with systems and interdependent phenomena. (Schein 1965, p. 65)

Our deep cultural assumptions about human nature sooner or later get expressed in the way we hire, train, and manage people. In the same way, employees have deep culturally based assumptions about what to expect from an organization. These two sets of assumptions make up the unspoken psychological contract. We have seen a major shift in these assumptions from (a) both parties assuming that valued employees can count on employment security or industrial tenure to (b) organizations replacing employment security with employability security and current generations of employees feeling no loyalty to employers.

I first observed this shift in consulting for Apple in the 1980s when it became understood that employees did not owe the company loyalty and the company did not owe anyone a job. The rationalization was articulated as follows: Even if we fire you, you will be more employable by others because of everything you learned here. In a way, this was saying that there was no moral obligation on the part of an organization to its employees, a reaffirmation of the assumption that organizations and employees should be rational economic actors.

It struck me that after the fall of the Soviet empire, when I did consulting in Europe, the former Soviet bloc countries reentering the capitalist world had trouble with this particular issue. Was it part of a company’s obligation to worry about employment security? For example, I learned that West German companies who had not lived under communism had no trouble rejecting this obligation, but they had difficulty integrating the former Soviet East German companies who still clung to employment obligations as a legitimate part of running a business. Social responsibility is reemerging as a value that private sector organizations should embrace, but that seems to have more to do with environmental obligations than with employment obligations.

One segment of the OD community is committed to this obligation of employment security, arguing that more and better work gets done when organizations treat their employees as whole persons, develop their talent, create trusting collaborative relationships, and have some version of a tenure system in place. Many in the academic community would argue that this has not been proven with research. My own conclusion is that it depends on what kind of task and what kind of effectiveness and safety issues are involved. If the task is complex, requiring the coordination of several employees, or if the task is dangerous and, therefore, requires timely performance and reporting of problems, then long-term relationships and mutual trust become crucial. As I argue in my latest book, *Humble Inquiry* (Schein 2013), trusting, open task-related communication requires relationship building between bosses and subordinates, especially in high-hazard industries, such as airlines and nuclear plants. Clearly not all organizations and not all tasks require that level of commitment, but organizations who choose not to form personal relationships with their employees and depend on the purely rational-legal type of psychological contract have discovered to their dismay that employees have many ways of subtly sabotaging their organizations by passive-aggressive behavior of various sorts.

Amitai Etzioni's (1961) typology of psychological contracts highlighted the differences between three types of organizations that involve their employees in three fundamentally different ways. Prisons and mental hospitals are coercive in leaving inmates few choices; churches, schools, and philanthropic organizations expect their employees to be morally involved and concerned about the values of the organization; businesses expect what Etzioni called calculative involvement that should maximize economic benefit for both the employee and the organization. This typology reminds us that organizations exist within broader social and cultural contexts and much of what goes on in organizations is a reflection of what society sanctions, encourages, and allows. We recognize, of course, that all organizations reflect elements of all three contracts in terms of how they run, but we also find it useful to point out that businesses that are able to capture their employees on a moral level and define themselves as communities often perform better because of their more loyal and committed employees. How much having loyal and committed employees matters will depend more on the changes that are occurring in the work arena and in the individual attitudes of employees toward work and career. What we may see here is more fragmentation, contingency theories, and new forms of work and careers reflecting technological changes, task variety, managerial style, and cultural variation (Bailyn 2011, Barley & Kunda 2006, Schein & Van Maanen 2013).

CAREER ANCHORS

My own evolution in studying the individual–organization relationship is instructive. When I came out of the army into my first job at MIT, I was very ready to study how organizations coerce and indoctrinate their employees because I had become an expert on Chinese indoctrination of US POWs in the Korean conflict. In the late 1950s, organizations such as AT&T, GE, and IBM bragged about their socialization processes, so I had a ready-made research area. In the early 1960s, I launched a 44-person panel of MIT master's students; studied them thoroughly with tests, scales, and interviews; tested them again a year later to see attitude and value changes toward their employers; and found the data all over the map. A further test 5 years later still showed no consistent attitude change results. But I had invested a lot in these alumni, so I decided to interview and test them again 10–12 years out (Schein 1978, Schein & Van Maanen 2013).

I found that each panelist described a process of how repeated experiences and feedback gradually created in him (they were all men) a self-image consisting of self-perceived competences, motives, and values that functioned as a stabilizer in life and career choices—a career anchor. The stories fell into one of five categories based on where the center of gravity was in this self-image: becoming an expert at something, rising high on the corporate ladder, wanting to create a business of his own, wanting to be autonomous and free of organizational constraints, or wanting stability and security. Later research with many samples of men and women in different occupations revealed three more anchors: wanting to be of service to some cause, wanting pure challenge, and wanting a more integrated life between personal, family, and career issues.

It is ironic that with all my efforts to study organizations, some of my best research showed the power of individual differences in how careers and lives develop. I learned an important lesson about research and application. The career anchor categories have held up well and are a useful tool in adult career development counseling. I believe that the main reason for this is that the categories came directly out of empirical research rather than a priori theorizing. I did not force them into a theory or a two-by-two table, leaving some of my colleagues frustrated. My rule of thumb continues to be that if you find at least two cases that do not readily fit into the eight categories, then publish a paper about a new anchor, but only if you have really found two new cases that don't fit.

THE CHANGING NATURE OF WORK—INFORMATION TECHNOLOGY AND SOCIAL MEDIA

The biggest impact on the nature of work has occurred through information technology. Work itself has changed from manual to conceptual as information technology has taken over much of what was done by hand, by sight, and by feel or smell, as in the paint industry, for example (Zuboff 1984). The development of robotics and the 3D printer suggests that this trend will continue with unknown consequences for the nature of the labor market or the educational system. As the nature of work changes, employees become obsolete. Will retraining be sufficient to keep them employed? At the same time, entrepreneurial activity is increasing sharply as social norms toward autonomy increase and employees become more mobile. Much of this activity is in the invention of new services and products that benefit from the ease with which new applications can be created for a smartphone or tablet.

Cognitive style and abilities are changing as the new generation grows up with computers and games that require rapid response, multitasking, and mental agility more than physical agility. One wonders whether the skills that are acquired through the use of information technology and social networks also contribute to the individualization that is occurring. We can get more information and more done on our own than ever before. Information technology has also made it possible to do work at a distance, creating new forms of part-time, contract, and remote, at-home work. Just as we see one trend, we discover a countertrend as organizations like Google ask their employees to totally commit their lives to the company in return for free food and recreation on the Google campus and even free transportation to and from work. If employees can't all be in one place, technology now allows virtual meetings and teamwork that are claimed to be as effective as face-to-face interactions.

RESEARCH METHODS AND THE TENURE PROCESS DRIVE THE SYSTEM

I stated in 1965 that a research field evolves around two forces: a need to understand something that bothers us and research methods that enable us to study the phenomenon. In the 1960s, we were still trying to understand how in World War II so much evil could have been unleashed by the Germans and the Japanese. We also had to help reconstruct the countries that had been devastated by the war. Equally vexing was attempting to understand how so much evil could have been unleashed in South African apartheid and in US segregation and racism. These practical issues drove researchers to observe, study, and experiment with powerful group and organizational variables. The experiments showed us not only how powerful group forces are but also how easy it is to sway the individual toward conformity. The capacity for hurting others is present in all of us, and it is in our relationships with others and in particular cultural contexts that good and evil are stimulated and released.

There is a deep irony in the fact that these experiments were themselves eventually deemed cruel and harmful to their subjects and led to the current process of research having to be approved and shown not to be harmful to participants. MA, PhD, and PsyD students are not allowed to do interviews or surveys before getting approval, which sounds very ethical but, of course, leaves judgment to faculty panels. There is no clear base of knowledge that would enable such panels to decide whether a given interview or questionnaire would be harmful unless they used input from the OD clinicians who have been in the field and observed firsthand how a questionnaire administered to a group can change the perceptions and subsequent actions of that group. In the obsession to get the best possible data, we are often quite blind to the potential harm that can be done to the organization by the research process itself.

When I was in graduate school in the Department of Social Relations at Harvard University in 1949–1952, I had the good fortune of being exposed to sociology and anthropology as well as clinical and social psychology. The clinicians were working on the Thematic Apperception Test (TAT) to get at motivation, Samuel Stouffer and Paul Lazarsfeld had evolved survey technology that enabled the massive study of the attitudes of US soldiers, and anthropologists were developing typologies of cultures. Everyone was looking for what might be called governing variables that explained a great deal of the observations we were making. And then somehow we embraced the notion that the way to evolve theory was to differentiate behavior into multiple components, measure the components, and by factor analysis thereby discover the underlying variables. Surveys consisting of many questions and personality tests, such as the Minnesota Multiphasic Personality Inventory (MMPI) with its 500 self-description items, became available to young researchers and were much easier to use than Rorschach tests, TATs, or interviews that would have to be coded.

Sophisticated statistical methods enabled researchers to feed large quantities of observations into a computer and receive abstract variables that might not make any sense but could be labeled as new elements in a growing theory. To give one example of how such outputs can be totally misleading, when we studied repatriates of the Korean conflict in 1953, we found that both the POWs accused of collaboration and the ones deemed heroic because of their repeated attempts to escape resembled each other in being high on the MMPI psychopathic deviate scale. This made no sense until we looked at the individual items that made up the scale and discovered that it consisted mostly of low impulse control and the need to be active. Why was the scale not labeled “high activity need” in the first place? The fact that known psychopaths have a high activity need and low impulse control does not mean that these tendencies are true only for psychopaths.

What I see today is that abstract, quantitative, and statistical methodologies are driving the research process more and more. Of course what happens is that the research problems begin to reflect what it is possible to study with the existing methods rather than figuring out what should be studied and developing new methods for such study. A theoretical variable is defined; operational definitions are constructed; and a measurement tool is developed, given to large populations of subjects, and then tested for reliability and validity. Scores on this tool are then correlated with various outcome measures, and if the correlations are statistically significant, we rest our case: A new theory has supposedly been developed and statistically validated. The flaw, in my view, is the rush to abstraction and labeling of statistical phenomena that are not anchored in empirical reality.

For example, Gittell (2003, 2009) evolved, from careful observation and interviews, a set of seven variables that clearly related to the ability of working teams in an organization to better meet customer needs. These dimensions are a mix of three interpersonal variables—shared goals, knowledge of what each other does, and mutual respect—and four behavioral communication variables—timeliness, frequency, tasks relevance, and problem solving (versus blaming). So far, so good, but then a survey instrument is developed to enable selected respondents to rate their perceptions on five point scales, data are gathered for each dimension with a single question, and it is found that the seven dimensions correlate with each other, suggesting that they might reflect a single construct. Because Gittell is interested in a theoretical concept of relational coordination, she then averages the numbers across the seven dimensions and finds that, indeed, the average also correlates with better outcomes. So now this statistical average of the seven ratings is labeled relational coordination and treated as a single variable, although actual coordination has never been measured, only inferred. The label now drives the research process in that groups who take the survey believe they are measuring the level of coordination when, in fact, they may simply be measuring good management or high morale. Relational coordination becomes an accepted

variable, presumably measured by a valid research instrument, when, in fact, coordination has never been defined or measured at all.

The survey and the numbers are easy to get and attractive to measurement-oriented managers, but they can be misleading with respect to what is actually going on in a given group, unless the individual dimensions are examined for their sociopsychological implications. Averaging perceptions about whether or not group members respect each other with another dimensions such as frequency of communication makes no sense if we consider what it would take to change undesirably low scores on either of these dimensions. For example, we could increase the frequency of communication between doctors and nurses, but if the doctors were disrespectful already, we might find disrespect increasing. The statistical success of the overall measure has blinded researchers to what they are actually dealing with in a hospital where the survey reveals that the doctors and the nurses don't respect each other.

The process of labeling the statistical phenomenon a measure of coordination and basing it on an average of seven dimensions that do not hang together theoretically despite correlating with each other potentially focuses the subjects on the wrong phenomenon and blinds them to the possibility that the work needs to be redesigned rather than coordinated. My point is that the passion for measurement, supported both by subjects and by researchers, creates variables such as relational coordination that become statistical artifacts rather than theoretical constructs that lead to practical implications.

Studying these phenomena experimentally has proven to be difficult because of the ethical implications of asking subjects to do things that etiquette and cultural rules prohibit. But when experimentation is basically impossible with human subjects, why have we not done more with field work and observation? Sociologists of the Chicago School, such as Everett Hughes, Erving Goffman, and Howard Becker, have shown us that occupations and social situations can be infiltrated and studied with good results. But with the exception of a few places such as the MIT Sloan School, where John Van Maanen trains graduate students in ethnography, these methods have not penetrated organizational psychology, or, as it is more often called these days, organizational behavior.

Field methods such as ethnography, participant observation, and/or complex longitudinal case studies are expensive in terms of time and money. They do not lend themselves to the requirements of PhD dissertations, but when they are done, they are often far more informative than statistical studies. For example, in the very illuminating ethnographic study of why some hospitals adopt and others reject the implementation of an 80-hour cap on residents' work weeks in surgical units, Kellogg (2011) shows how successful implementation hinged on the interaction of gender, surgical specialty, and the availability of meeting space for the residents to organize themselves. In her study of why some teams adopt a complex new open-heart surgery, whereas others do not, Edmondson (2012) shows how the adopting teams went through a voluntary relationship-building training program, whereas the teams that abandoned the procedure had relied just on professional competence. Van Maanen's (2005) studies of how Disney World migrated from the United States to France and to Japan showed that whereas the Japanese wanted to recreate the US version as much as possible, the French, by contrast, wanted to make it as French as possible. Such studies consistently confirm that relationships, group norms, and cultural context are the key drivers of organizational behavior, and these have to be observed directly, not inferred from survey-generated perceptions.

In many ways, researchers have become even more individualized in that many social psychologists study the social only as context for the study of cognitive functions in the individual. Reinforcing this individual focus is the excitement over neuroscience, which will soon allow different kinds of feelings and behavior in the brain to be tracked with great precision. That

technology might actually bring relationships and groups back into the research lab, as one will be able to study the brain activity of several people in different kinds of social and intimate relationships and demonstrate that in a trusting positive relationship, the areas of the brain that are activated are fundamentally different from those areas that are activated in any kind of individual activity.

My point is that the availability of multi-item survey instruments supported by complex statistics that assure reliability and validity has led researchers and practitioners to rely on these instead of good observation or a research process that is more congruent with the phenomena they are studying. In a recent email exchange, an OD practitioner asked, Does anyone out there know of a good 10-item survey questionnaire on culture? That question says it all. First, we differentiate culture into hundreds of behaviors, attitudes, values, and norms; then we factor analyze the items and create a two-by-two table producing four clusters of items; then we label these with abstract words and present these labels as types of cultures; and then we look for a small set of questions to get us to the four types more quickly. Is this good empirical science? Or is it just more convenient than bringing groups of employees of an organization into a room together and asking them to provide some examples of what kinds of things are expected of them, listening carefully for those things on which there is obvious consensus and ignoring things that are clearly individual? This process quickly brings out what the important elements of a given culture are, which, I believe, is more valid than trying to combine the answers of hundreds of employees into indexes and then deriving group variables from individual responses. Why do we think that teaching graduate students statistical methods is better than teaching them how to do field observations and to analyze group behavior?

THE POWER OF US CULTURE

Much of what I have described and commented upon, especially the demise of group dynamics as an object of study, can be attributed to some deep assumptions within US culture (Schein 2013). If we take a historical perspective, the handwriting was already on the wall in the 1960s when human relations labs drifted from being focused on leadership and group dynamics to focusing more on individual learning.

The next signal came after we discovered the Japanese using new methodologies for improving production systems—ironically based in part on W. Edwards Deming and Joseph Juran, who were both Americans—that involved quality circles in which feedback to employees in groups enabled them to improve production methods. We quickly introduced these methods in the United States but found that our organizations only liked the statistical quality control elements of the system, not the circles. We built elaborate systems to give feedback to the individual worker and ignored what the Hawthorne studies and subsequent ethnographies about work groups showed over and over again: that critical variables such as how hard to work and how much attention to pay to quality are driven primarily by group norms. The disappearance of group therapy programs is a further indicator and probably connected to the individualistic bias in our insurance system, as evidenced by lower reimbursements for group sessions.

We, as a culture, are hooked on individual accountability. Many of my clients have told me about how their companies are now espousing teamwork, but I have yet to find one that pays groups or that lets groups decide whom to promote. I think professional organizations come closest to this concept, for example, through doctors electing their own chiefs of service. But to do what they used to do in Yugoslavia, that is, having production workers elect their own foreman, is not something that would fit well into our organizational theories or practices.

I continue to be amazed at how incompetent our senior executives are in running meetings, task forces, and other kinds of group activities. This same incompetence, or just call it a bias, is reflected in the architecture of classrooms, meeting rooms, and boardrooms. If we really admitted that management is all about individual power, then the long boardroom table would continue to make sense, but we are now espousing different models of authority and claiming that the executive function has to be performed by more of a team, without making much of an effort to learn how to build and manage a team or introduce circular tables into executive suites.

Yet another indicator of our pragmatic individualistic bias is our impatience with Japanese and Chinese decision-making methods that take too long because everyone has to be consulted before they can make a decision. Many US managers simply take for granted that Eastern systems are inefficient and we must teach them our presumably better Western methods. What I find interesting about this presumption is that we seem to believe that we can just change those cultures to fit our models and that they will work better if they do it our way.

In a recent interview, I was asked how multinational companies will be able to handle the many intercultural issues arising from the many foreign mergers, joint ventures, and subsidiaries that are becoming more and more routine. Why not just hire more anthropologists to do cultural education? I think this will not help for two reasons. First, there are too many cultures involved, so too much learning would be required for managers to grasp everything. It is enough to brief them on what not to do so as not to offend people or make stupid blunders. But that is not where the cultural issues arise. They arise around subtle differences between how authority and status are defined in each culture, what it is appropriate (or not) to say to someone to their face, how to deliver negative messages across authority lines, how to define workable psychological contracts, how to create viable policies around the differentiation of work and family roles, and how rewards, punishments, and discipline are defined.

To work successfully with people from other cultures around such issues will require more than simply knowing what the textbooks say about their respective cultures. It will require the multicultural work groups to examine these issues with respect to how they affect its actual work, and that, in turn, will require not anthropologists but organization development specialists trained in creating and managing communication in groups. Each work group will have to learn its own norms, taking into account the norms of the home cultures from which individual members come. The most important idea along these lines is Edmondson's (2012) concept of *Teaming*, the notion that the members of a group who have to work together will have to learn together, too. Such learning will require "cultural islands," settings in which some of the constraining rules of each culture can be lifted so that team members can get to know each other at a deeper level (Schein 2010). Each other's cultural biases will be revealed most productively in the learning process, where mutual understanding can be fostered and new ways of working can be created together based on such understanding. In that learning process, members will also have to develop the attitudes and skills of perpetual mutual helping (Schein 2009) and the interpersonal attitude and skill of humble inquiry (Schein 2013).

TASK COMPLEXITY WILL FORCE A COUNTERTREND

Given what I have said about US culture not being comfortable with group work, how will we ever come to take teaming seriously? I think US culture has an even more fundamental assumption at its core: We do what works, and we are ultimately pragmatic, so we will use groups, teams, and learning when they are the only way to accomplish our objectives. We have always been good at teamwork when it was necessary to collaborate. However, we have rarely if ever built it into our reward and promotion systems. What will change this? I think we will see a resurgence of focus on

groups and group dynamics when the technologies in all the fields that we work in become more fragmented and complex, requiring more specialists whose work will have to be coordinated to get anything done. We see this most clearly in the high-hazard industries and in health care.

The medical field has always been of interest to social scientists and now provides a new incentive for the study of groups and teamwork because more and more medical tasks require coordination, collaboration, and perpetual mutual help (Schein 2009). The best example is Edmondson's (2012) study described above, which stimulated surgical groups to engage in a new kind of team building because of their recognition of the intrinsic complexity of the surgery itself. The more complex the task and the greater the cultural diversity of the subordinates, the more managers will have to learn humility and build relationships with their subordinates to guarantee good upward communication and mutual helping. The need for coordination will drive us back to another look at group dynamics, meetings, and team learning. Hopefully, this time around we will do a better job of training our leaders in these important functions.

CONCLUSION

The thrust of organizational psychology in 1965 was to look at all parts of organizations and to develop a systemic view. That led me to close my book (Schein 1965, p. 106) with the following paragraph, which, as I reread it, is as relevant today as it was then:

I have tried to argue for an approach to organizational effectiveness which hinges upon good communication, flexibility, creativity, and genuine psychological commitment. These conditions are to be obtained by (1) recruitment, selection, and training practices which stimulate rather than demean people; (2) more realistic psychological relationships based on a more realistic psychological contract; (3) more effective group action; and (4) better leadership in the sense of goal setting and value-definition. The argument is not based on the assumption that this would be nice for people or make them feel better. Rather, the argument is that systems *work better* if their parts are in good communication with each other, are committed, and are creative and flexible. (Emphasis in original)

DISCLOSURE STATEMENT

The author is not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the objectivity of this review.

LITERATURE CITED

- Argyris C. 1964. *Integrating the Individual and the Organization*. New York: Wiley
- Argyris C, Putnam R, Smith D. 1985. *Action Science: Concepts, Methods, and Skills for Research and Intervention*. San Francisco: Jossey-Bass
- Bailyn L. 2011. *Breaking the Mold*. Ithaca, NY: Cornell Univ. Press
- Barley SR, Kunda G. 2006. *Gurus, Hired Guns, and Warm Bodies*. Princeton, NJ: Princeton Univ. Press
- Bion WR. 1961. *Experiences in Groups: And Other Papers*. New York: Basic Books
- Bradford LP, Gibb JR, Benne KD, eds. 1964. *T-Group Theory and Laboratory Method: Innovations in Re-Education*. New York: Wiley
- Bunker BB, Alban BT. 1997. *Large Group Interventions*. San Francisco: Jossey-Bass
- Bushe GR, Marshak RJ. 2014. Dialogic organization development. In *The NTL Handbook of Organization Development and Change*, ed. BB Jones, MB Brazell, pp. 193–211. San Francisco: Wiley
- Cascio WF, Aguinis H. 2008. Research in industrial and organizational psychology from 1963 to 2007: changes, choices, and trends. *J. Appl. Psychol.* 93(5):1062–81

- Edmondson A. 2012. *Teaming*. San Francisco: Jossey-Bass
- Etzioni A. 1961. *Complex Organizations*. New York: Holt, Rinehart & Winston
- Forrester J. 1971. Counterintuitive behavior of social systems. *Technol. Rev.* 73(3):52–68
- Gittel JH. 2003. *The Southwest Airlines Way*. New York: McGraw-Hill
- Gittel JH. 2009. *High Performance Healthcare*. New York: McGraw-Hill
- Greenleaf RK. 1977. *Servant Leadership*. New York: Paulist
- Homans G. 1950. *The Human Group*. New York: Harcourt Brace
- Kellogg KC. 2011. *Challenging Operations*. Chicago: Univ. Chicago Press
- Kornacki MJ, Silversin J. 2012. *Leading Physicians Through Change*. Tampa, FL: Am. Coll. Physician Exec. 2nd ed.
- Lewin K. 1947. Frontiers in group dynamics. *Hum. Relat.* 1:5–41
- Revens R. 1980. *Action Learning: New Techniques for Management*. London: Blond & Briggs
- Roethlisberger FJ, Dickson WJ. 1939. *Management and the Worker*. Cambridge, MA: Harvard Univ. Press
- Schein EH. 1965. *Organizational Psychology*. Englewood Cliffs, NJ: Prentice-Hall
- Schein EH. 1969. *Process Consultation*. Reading, MA: Addison-Wesley
- Schein EH. 1978. *Career Dynamics*. Reading, MA: Addison-Wesley
- Schein EH. 1985. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass
- Schein EH. 1987. *The Clinical Approach in Field Work*. Newbury Park, CA: Sage
- Schein EH. 1999. *Process Consultation Revisited*. Reading, MA: Addison-Wesley
- Schein EH. 2001. Clinical inquiry/research. In *Handbook of Action Research*, ed. P Reason, H Bradbury, pp. 228–37. Los Angeles: Sage
- Schein EH. 2003. *DEC Is Dead, Long Live DEC: The Lasting Legacy of Digital Equipment Corporation*. San Francisco: Berrett/Kohler
- Schein EH. 2009. *Helping*. San Francisco: Berrett/Kohler
- Schein EH. 2010. *Organizational Culture and Leadership*. San Francisco: Jossey-Bass/Wiley. 4th ed.
- Schein EH. 2013. *Humble Inquiry*. San Francisco: Berrett/Kohler
- Schein EH, Hall DT. 1967. The student image of the teacher. *J. Appl. Behav. Sci.* 3:305–37
- Schein EH, Van Maanen J. 2013. *Career Anchors*. San Francisco: Jossey-Bass. 4th ed.
- Sherif M, Sherif C. 1969. *Social Psychology*. New York: Harper & Rowe
- Trist E, Murray H. 1990. *The Social Engagement of Social Science*, Vol. 1. Philadelphia: Univ. Pa. Press
- Trist E, Murray H. 1993. *The Social Engagement of Social Science*, Vol. 2. Philadelphia: Univ. Pa. Press
- Van Maanen J. 2005. Mickey on the move: observations on the flow of culture in the multinational corporation. In *Organizational Theory and the Multinational Corporation*, ed. E Westney, pp. 255–300. New York: St. Martin's. 2nd ed.
- Zuboff S. 1984. *In the Age of the Smart Machine*. New York: Basic Books



Contents

Organizational Psychology Then and Now: Some Observations <i>Edgar H. Schein</i>	1
Group Affect <i>Sigal G. Barsade and Andrew P. Knight</i>	21
The Modeling and Assessment of Work Performance <i>John P. Campbell and Brenton M. Wiernik</i>	47
Justice, Fairness, and Employee Reactions <i>Jason A. Colquitt and Kate P. Zippay</i>	75
Methodological and Substantive Issues in Conducting Multinational and Cross-Cultural Research <i>Paul E. Spector, Cong Liu, and Juan I. Sanchez</i>	101
Leadership Development: An Outcome-Oriented Review Based on Time and Levels of Analyses <i>David V. Day and Lisa Dragoni</i>	133
Beyond Lewin: Toward a Temporal Approximation of Organization Development and Change <i>Jean M. Bartunek and Richard W. Woodman</i>	157
Beyond the Big Five: New Directions for Personality Research and Practice in Organizations <i>Leaetta M. Hough, Frederick L. Oswald, and Jisoo Ock</i>	183
Corporate Social Responsibility: Psychological, Person-Centric, and Progressing <i>Deborah E. Rupp and Drew B. Mallory</i>	211
Time in Individual-Level Organizational Studies: What Is It, How Is It Used, and Why Isn't It Exploited More Often? <i>Abbie J. Shipp and Michael S. Cole</i>	237

Dynamics of Well-Being <i>Sabine Sonnentag</i>	261
Low-Fidelity Simulations <i>Jeff A. Weekley, Ben Hawkes, Nigel Guenole, and Robert E. Ployhart</i> . . .	295
Emotional Labor at a Crossroads: Where Do We Go from Here? <i>Alicia A. Grandey and Allison S. Gabriel</i>	323
Supporting the Aging Workforce: A Review and Recommendations for Workplace Intervention Research <i>Donald M. Truxillo, David M. Cadiz, and Leslie B. Hammer</i>	351
ESM 2.0: State of the Art and Future Potential of Experience Sampling Methods in Organizational Research <i>Daniel J. Beal</i>	383
Ethical Leadership <i>Deanne N. Den Hartog</i>	409
Differential Validity and Differential Prediction of Cognitive Ability Tests: Understanding Test Bias in the Employment Context <i>Christopher M. Berry</i>	435
Organizational Routines as Patterns of Action: Implications for Organizational Behavior <i>Brian T. Pentland and Thorvald Hærem</i>	465
Pay, Intrinsic Motivation, Extrinsic Motivation, Performance, and Creativity in the Workplace: Revisiting Long-Held Beliefs <i>Barry Gerhart and Meiyu Fang</i>	489
Stereotype Threat in Organizations: Implications for Equity and Performance <i>Gregory M. Walton, Mary C. Murphy, and Ann Marie Ryan</i>	523
Technology and Assessment in Selection <i>Nancy T. Tippins</i>	551
Workplace Stress Management Interventions and Health Promotion <i>Lois E. Tetrick and Carolyn J. Winslow</i>	583

Errata

An online log of corrections to *Annual Review of Organizational Psychology and Organizational Behavior* articles may be found at <http://www.annualreviews.org/errata/orgpsych>.

