EMERGING ASSUMPTIONS ABOUT ORGANIZATION DESIGN, KNOWLEDGE AND ACTION

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Abstract: Participants in the Organizational Design Community's 2013 Annual Conference faced the challenge of "making organization design knowledge actionable." This essay summarizes the opinions and insights participants shared during the conference. I reflect on these ideas, connect them to recent scholarly thinking about organization design, and conclude that seeking to make design knowledge actionable is nudging the community away from an assumption set based upon linearity and equilibrium, and toward a new set of assumptions based on emergence, self-organization, and non-linearity.

Keywords: Organization design, actionable knowledge, design thinking, evolutionary experimentation, non-linearity, emergence

I was one of the members of the Organizational Design Community (ODC) who attended the conference on Making Organization Design Knowledge Actionable. We grappled with a source of long-standing discontent for both practitioners and scholars: Although there is a very large body of knowledge about organizations and organizing, examples of effective applications of this knowledge in designing real organizations are few and far between.

Why is this? Some observers suggest that researchers' preoccupation with scientific rigor has meant sacrificing practical relevance (Aldag, 1997; Hambrick, 1994). Other observers say organizational scholars have grown "self-absorbed" and "self-indulgent" and, as a result, inattentive to human welfare and world affairs (Starbuck, 2003). Still others imply that we need to become better salespeople for the discipline. For example, the editor of a special issue of *Administrative Science Quarterly* on The Utilization of Organizational Research concluded:

The predominant use of organizational research probably occurs through gradual seepage into organizations of new ideas, metaphors, and rationales for explaining human behavior. At various times, someone uses some of these ideas to reach a decision or to take new actions. Often, people use them to justify either a decision already reached or existing activities. Inevitably, people use or distort ideas derived from organizational research to pursue their own advantage and sometimes even to harm someone else." (Beyer, 1982: 615)

Our focus in the conference was not on determining why design knowledge has not been applied instrumentally in the past but rather on asking what ODC members might do to improve matters in the future. We started the morning by analyzing a living case that laid bare the design challenges facing Ascension Health. In the afternoon, we listened to short presentations on new design tactics, and we engaged in several rounds of small group discussions probing for fresh approaches to making organization design knowledge actionable.

My objectives in this essay are to reflect on the ideas that surfaced at the conference, consider recent scholarly writing on design, and think broadly about pathways to improving the utilization of our design knowledge. My overall assessment is that design-oriented

organizational scholars are in the process of shifting from one integrated set of assumptions to another somewhat more amorphous set of assumptions. Specifically, I believe that an amalgam of mutually reinforcing beliefs, theories, and methods honoring the notions of linearity and equilibrium has held back the application of design knowledge, but the field shows signs of switching to a new set of assumptions that embraces non-linearity, self-organization, and emergence (Meyer, Gaba, & Colwell, 2005). For the purposes of this essay, I have organized my observations into three related sets of assumptions, focusing respectively on the essence of organization *design*, the basis of design *knowledge*, and the nature of *action* required to enact a particular design. Established and emerging versions of these assumption sets are shown below in Tables 1-3.

ASSUMPTIONS ABOUT DESIGN

Past approaches to organization design have taken it for granted that top-notch designs display "fit", "congruence", or "alignment". In practice, this means that internal alignments should be created between separate components of designs such as strategic objectives, reporting relationships, and reward systems, and external alignments should be devised to match organizational designs with environmental attributes (Nadler & Tushman, 1980). Established design templates typically consist of hierarchical configurations of nested subunits, often accompanied by repertoires of processes and routines devised to direct and control member behavior within those configurations.

Both theories of organization and prevailing research methodologies are infused with implicit and explicit assumptions of equilibrium (Meyer, et al., 2005), so it is only natural that organizational designs have sought to stabilize social structures, control members' behavior, and absorb uncertainty. The fundamental, albeit implicit, purpose of various designs has been to boost organizations' abilities to extract value from opportunities presented by their environments. Academic designers of organizations have, by and large, regarded their products as conceptual models. Organizational practitioners have, by and large, regarded them as metaphysical abstractions.

Table 1. Assumptions About Organizational Designs

Established Assumptions	Emerging Assumptions
"Fit" and "congruence" constitute fundamentals of good designs. Designers must align components of designs with each other and with environments.	Organizations face multiple environments and these environments evolve continuously. Designers should avoid rigid configurations of components and tight alignments with environmental elements.
Organization designs should be encoded in hierarchical structural configurations supported by organizational routines that program members' behavior.	Organization designs should emerge from "design thinking" by invoking principles that generate empathy with users, identify related worlds, and test new ideas via rapid prototyping.
Designs should propel organizations toward equilibrium. Designers should create structures and processes that ensure control, create stability, and absorb uncertainty.	Organization designs should propel organizations away from equilibrium for that is where self-organizing processes can occur. Designs should set in motion novel actions in pursuit of novel goals.
Designers should incorporate features into the organization that allow it to capitalize on environmental opportunities.	Designers may seek to change environments to render them more munificent for and receptive to organizations.
Designs are purely cognitive or ideational patterns constructed from abstract ideas.	Design principles can be elicited by behavioral simulations in the laboratory and discovered by acting within 3D virtual environments.

Many of those attending the conference expressed beliefs and assumptions (summarized on the right-hand side of Table 1) that challenge the conventional wisdom concerning organization design, knowledge, and action. Eric Engler, a principal architect of Ascension Health's strategy and organization, started off the conference by painting a portrait of a loosely integrated healthcare organization facing multiple regional environments that are changing at different rates. Scholars have recently recommended designing organizations that face such conditions as flexible and loosely coupled configurations (Dunbar & Starbuck, 2006) – that is, thinking of organization design not as a stable structure to achieve but as a developmental

process to keep underway or a string of evolutionary experiments (Meyer et al., 2005).

Later in the morning, Natalie Nixon challenged the established hierarchical configuration assumption, remarking that "the problem is there's not enough *design thinking* in organizational design." When asked to elaborate, she said that design thinking is a problem-solving process that begins with the question, What problem am I solving for the user? Thus, professional designers start the problem-solving process by taking an empathetic stance. Then they begin to search in "related worlds" for similar needs, experiences, and possible solutions. Lastly, as feasible solutions begin to develop, designers engage in prototyping to test and refine them. Overall, design thinking produces solutions that have a solid chance of success.

In contrast to the belief that designs ought to propel organizations toward equilibrium and keep them there, an emerging view holds that designs ought to push organizations away from equilibrium (Dunbar, Romme, & Starbuck, 2008) and harness processes of self-organization. More recent theorizing conceiving of organizations as complex adaptive systems lends support to this line of thought (Anderson, 1999). This theorizing argues that as organizations move away from equilibrium, system-level order can spontaneously arise from the action and interaction of system components, without intervention by a central designer (Chiles, Meyer, & Hench, 2004).

Jay Galbraith made a related point in the conference, remarking that in his role as a design consultant he never proposes new structures for a client to install but focuses instead on initiating lateral processes. "I never touch structure – it's all about process. You don't put structures into place unless you have the strategy down pat. How can you act intelligently if you don't know what you want to do?" In reflecting on the design challenges facing Ascension Health, Charles Snow made a similar observation:

We do know a lot about particular designs – what they're good for and not good for – and we can mix and match them in a modular style and get some predictable results. But until you know what the future environment will be like, what do you design for?

One response to this question could be that in addition to designing organizations to fit their future environments, designers could expand their targeted domain by helping to enact environmental conditions that will become more auspicious for their organizational clients. Such an expanded focus might indeed help organizations become more effective, but it also pushes designers into the realms of power, politics, and ethics.

Finally, in contrast to the established understanding of organization designs as purely cognitive models, some participants in the conference reported that they were turning to members' behaviors as a source of design inspiration. Phanish Puranam described his work using laboratory simulations to demonstrate and test design principles. He said that with careful specification of the problem, it's possible to replicate real organizations in the lab. Ana Reyes' presentation showcased the use of three-dimensional virtual environments to enable participants to prototype and experiment with novel social structures and processes by assuming virtual identities in the form of avatars.

ASSUMPTIONS ABOUT KNOWLEDGE

Where does design knowledge about organizations come from? The established viewpoint is that knowledge is created by performing discrete tasks in a linear sequence. First, scholars design research studies that enable them to observe organizations and develop causal models of how they work. Then practitioners and/or consultants turn scholars' models into blueprints and implement them, leaving managers to occupy and operate the organizational structures once they are in place.

This division of labor means that research designs are invariably retrospective because scholars only study organizations that currently exist or have existed in the past. However, scholars' historical observations of individual organizations yield models that become "unrealistically complex as they develop elaborate explanations for events that are random or idiosyncratic perturbations from what is normal" (Dunbar et al., 2008: 556). Other retrospective studies use secondary data drawn from large samples to build descriptive profiles of average organizations. However, profiles of average organizations are unlikely to supply templates for designing novel or excellent organizations. "Truly innovative designs

must originate in deviant cases or fantasies rather than in statistical norms" (Nystrom & Starbuck, 1981: xvii).

Established dictums about social science theory and methodology pervade the research studies that scholars have conducted to generate organization design knowledge. Nomological nets, operational definitions, and tests of statistical significance are emblematic of the validity upon which design knowledge has been thought to depend. Valid research results, of course, are regarded as the *sine qua non* for developing credible organization design prescriptions.

Table 2. Assumptions About Design Knowledge

Established Assumptions	Emerging Assumptions
Once knowledge has been created by scholars, it may then be transferred into application by practitioners.	Knowledge is generated through the skilled translation of ideas back and forth between academic and practitioner communities.
Knowledge arises from the systematic analysis of scholars' retrospective descriptions of historical organizational structures and processes.	To be useful, knowledge must incorporate contemporary organizational phenomena like information technologies and globalization.
Credible design knowledge comes from collecting objective data from large numbers of organizations, conducting systematic analyses of these data, and calculating quantitative relationships between design attributes and outcomes.	Credible design knowledge comes from field research, open-ended conversations with practitioners, and naturalistic observations. Knowledge is valid only when outcomes are predicted a priori, designs are implemented in context, and results are observed in real time.
Design knowledge achieves validity though nomological rigor, operational definition of variables, and documentation of causal relationships between carefully measured variables, as demonstrated by statistical analyses.	Design knowledge achieves pragmatic validity through communication in clear and evocative language, should often be elucidated in narrative form, and benefits from illustration in pictorial diagrams.
Prescriptions for designing organizations ought to be deduced logically from scholars' theoretical models and show how design attributes will bring about desired outcomes.	Design prescriptions should spring from designers' interventions because the full range of possible structures often is not exhibited by existing organizations, and the full range of feasible actions often cannot be imagined by their members.

Conference participants' views on the origins of organizational knowledge moved beyond role specialization and division of labor to adopt a more collaborative posture, emphasizing the importance of engagement, conversation, and collaboration between scholars and practitioners. Andy Van de Ven presented his views on the crucial importance of early, close, and ongoing engagement between scholars and practitioners in seeking solutions to design problems – a process he calls "engaged scholarship" (Van de Ven, 2007). Ron Burt concurred, going on to argue that the value of such engagement arises not from information transfer or brokerage but from skill in "translating" information that can only flourish when members of different occupational communities interact. He went on to say:

Translation isn't an information retrieval mechanism. It changes who you are. You learn another language, and that means not only can you take insights out of the applied base, but you can translate them back in a way that is more compelling. I want to inoculate against the common misunderstanding that this is a way to get information. It's not. It's a way to be a different kind of person.

In contrast to the established practice of seeking to generate design knowledge by studying organizations in large samples and in retrospect, the dialogue at the conference addressed the importance of observing organizations one-by-one, and addressing recent phenomena like information technologies, social media, and globalization – and in the case of Ascension Health, the Affordable Care Act. Both scholars and practitioners saw greater value in data gathered through field research than in secondary and archival data. Several of us opined that knowledge about the utility of a particular organizational design becomes truly credible only when the design's outcomes are predicted ahead of implementation, and when results are observed in context and as they emerge.

Instead of the conventional social scientific view of validity, a view held by many at the conference is that the pragmatic validity of knowledge about design turns upon designers' abilities to portray their templates in clear and evocative language. Compelling narrative

accounts and graphic diagrams may be more convincing and offer clearer guidance to those engaging in implementation than cleverly operationalized variables and statistically supported causal hypotheses.

An overriding theme from the conference is that action and knowledge are closely intertwined. This assumption was evident in Andy Van de Ven's remarks on engaged scholarship:

Organization design doesn't have neat, known, stable answers. Knowledge transfer can't close the gap between academics and practitioners. Instead, it's a problem of knowledge co-production. When you're talking about organization design knowledge, it is more useful to produce it through joint engagement.

The entanglement of action and knowledge ran through Natalie Nixon's remarks about the importance of iterative prototyping, Jay Galbraith's call for cross-functional teams, and Alan Meyer's characterization of the design process as a series of evolutionary experiments. Dunbar, Romme, and Starbuck (2008) have argued that only by intervening in organizations can would-be designers come to understand them well enough to make useful design prescriptions. They note that pressures for conformity and respectability can impose strong constraints that prevent top managers from adopting unconventional structural configurations that might turn out to be effectual. Similarly, norms of rationality may stifle creativity and prevent organizational members from conceiving of unorthodox actions that might prove feasible and beneficial.

ASSUMPTIONS ABOUT ACTION

Most established organization design efforts are rooted in a rational model of action (March, 2006). This normative model holds that understanding should precede action, and the results of action should be measured against predetermined goals. The rational model enjoins designers to understand, act, and evaluate – in that order. This action model implies that designing is an activity that should be embarked upon periodically not continuously. Only by designing in installments can outcomes be evaluated and linked to design interventions. The rational model of action supports the division of labor discussed above: Scholars should understand organizations, consultants should translate scholars' understandings, and practitioners should take action based on understanding.

Established Assumptions Emerging Assumptions Model of action: Model of action: Understand \rightarrow Act \rightarrow Evaluate Evaluate → Act → Understand Designers must understand organizations before they Designers cannot understand organizations until and attempt to change them. unless they try to change them. Organization design should be undertaken in an Organization design should be an ongoing, continuous episodic or periodic fashion. process Designing should be decomposed into specialized Designing should unfold as an iterative sequence roles that are invoked sequentially. Scholars should of experiments in which scholars, consultants, and understand, consultants should translate, and practitioners collaborate in acting, evaluating, and practitioners should implement. designing.

Table 3. Assumptions about Action

Several participants in the conference offered support for a model of action that accumulates knowledge through feedback from experience instead of through analysis and anticipation (March, 2006). This mechanism has been termed "existential action" (Walsh, Meyer, & Schoonhoven, 2006), "experiential learning" (Greve, 2003), and "evolutionary experimentation" (Meyer et al., 2005). In this model, action becomes the basis for understanding. The model enjoins designers to begin by evaluating a focal organization's context and then to ask, What could we do here on a small scale that makes sense in the short run? Observation of the outcomes of experimental actions affords the basis for discerning principles of organization design. Andy Van de Ven put it like this: "It's the way 3M became so successful – you make a little, and you sell a little, then you make a little more, and you sell a little more."

Approaching organization design as evolutionary experimentation capitalizes on a fundamental aspect of complex adaptive systems: When agents engage in local behavior, they generate global design characteristics that feed back to alter the way the agents interact. Thus, actions not only proceed along feedback loops but can also change those loops (Anderson, 1999).

CONCLUSION

Social interactions at the conference epitomized and demonstrated many of the emerging assumptions listed in Tables 1-3. Knowledge was shared in narrative and graphic fashion, and it was created on the fly through skilled translation of ideas between academics and practitioners. "Design" thinking spilled over into "research" thinking, as analogies were drawn between designing products, software, screwdrivers, and systems to designing experiences and services such as delivering healthcare to the poor and vulnerable members of society.

I suspect that some of the academics in attendance may have realized that organization design and research design are "related worlds." Research designs, like organization designs, ought to be regarded as experimental prototypes. Both kinds of designs should be treated as renewable licenses rather than fixed constitutions. In specifying units, structures, systems, and processes, designers of both research studies and organizations "should prefer options that are temporary rather than permanent, correctable rather than correct, and discoverable rather than known" (Meyer et al., 2005: 471).

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