

Managing as Designing with a Positive Lens

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Abstract

The role and potential contribution of a positive lens to the design of systems and organizations is the focus of this essay. The *positive lens* refers to an emerging perspective in the social sciences that emphasizes a positive stance toward our capacity to construct better organizations and technologies through a positive discourse. Joining a positive lens onto organizing with the transformative power of design thinking opens new horizons and uncovers previously overlooked possibilities for creating organizational and social well-being. We discuss the core practices that drive design and argue that they hold the key for applying a positive design attitude.

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Managing as Designing with a Positive Lens

Background and Aspirations

The *positive lens* refers to an emerging perspective in the social sciences that emphasizes our capacity to construct better organizations and technologies through a discourse that encourages human strengths and participative action in leading organizational change. In the disciplines of management and organization studies, the positive lens is reflected in a focus on the potential of designing hopeful organizations and more humanly centered technologies, that are not dominated by the detection of error and control of deviant behaviors. Similar to the propositions of positive psychology, which turns attention away from the treatment of dysfunctions and toward the encouragement of human potential, management and related disciplines find themselves in the midst of an attention shift that emphasizes our capacity to design better organizations and technologies by drawing on the best of human capabilities. This shift affects the way managers and policy-makers frame their discourse as they design and shape their respective organizations.

Another emerging perspective in the social sciences is the *managing as designing* approach that is open to constructive, divergent behavior and guards against premature closure in decisions and actions. An emphasis on designing has the potential to invigorate conservative scholarship and extend it beyond the traditional boundaries of default solutions to default problems. It allows us to ask legitimately not only how things work in an organization, but also what we should do to make things work in a more humanly desirable way, and to question why we should be doing familiar routines at all. The designing approach is action oriented and helps to bring together people from different disciplines and practices to jointly pursue a vision and boldly experiment with new socio-technical designs.

Furthermore, taking a systemic view, we hold that organizations and their information systems are inextricably coupled, and that to study one without the other would be myopic. It is hard to imagine organizations with no information systems and it is unlikely that information technology could have been developed as it has without the support of organizations that have embraced it. The lion's share of IT expenditures is invested in organizations and in the past few decades information technology has become part of every organization's infrastructure. The role and potential contribution of a positive lens to the design of information and organizations is the focus of this book. Joining a positive lens onto organizing with the transformative power of design thinking opens new horizons and uncovers previously overlooked possibilities for creating organizational and social well being. The positive lens applied to information and organization design opens broader considerations of social context, uses cross-disciplinary tools, takes a holistic approach, and emphasizes a responsible, ethical attention to human possibilities.

Next, we attempt to clarify what we mean by design, and how managers can adopt some of its guiding principles in their practice, by developing what Boland and Collopy (2004) call a

“design attitude.” The following sections attempt to address these issues by offering a deeper understanding of design as an ongoing organizational process, and suggesting the positive lens (Avital et al, 2006) as a way to encourage and enhance a design attitude among managers.

What is Design?

The process of design is inherent in organizational action, and is manifest in three dimensions of organizational practice as follows: the practice of constructing artifacts, the practice of using artifacts, and the practice of communicating about them. We picture these three practices as mediators of the three key elements of design attitude in organizational life, namely: design artifacts, design cognition, and design dialogue. The interdependency among these elements and practices is portrayed in (Figure 1) as the practice cycle of the design attitude.

When we consider the prevalent scholarship of design, we see that it focuses on *design artifacts*, which may be objects, systems, methods, processes or even experiences. Design artifacts are the most concrete manifestation of design. They have a finite nature and often they are defined by their boundaries. Design artifacts are shaped by designers through a crafting activity. The scholarship on design work focuses on the forming or constructing processes that can or should be applied in designing artifacts. Design processes are often defined by unique procedures and regularities. The link between the design artifact and its forming process is governed by practices of constructing that characterize the designer’s work and profession. In that context, the practices of constructing are instrumental, driven by technology and style, and focus on form and function of the underlying design object. The bulk of design scholarship is about the artifact and the practice of constructing it.

Designers do not work in a vacuum and their work is rarely a solitary act. They work in heterogeneous design teams where they share knowledge and reflect on an underlying design artifact and design process. They also must communicate with various stakeholders throughout the design process and facilitate a discussion among them. The scholarship that focuses on *design dialogue* embodies the exchanges and relationships among the actors who participate in the design process. Design dialogue reifies the practices of constructing. For example, it covers specifications and elicitation of requirements, joint development, rapid development, and the Open Source community discourse. The link between design dialogue and the cognitive process of designers is enacted through practices of communicating that characterize the communicative acts among the stakeholders and particularly the designers. By nature, the practices of communicating are both noetic and social, driven by attributed meaning and held worldviews, and focus on the discourse of the participating actors.

Designers thrive in inherent dialectics. For example, they are required to find a balance between form and function, to adhere to universal principles and at the same time to be grounded in situ, as well as to embrace ambiguity and to deliver on time. Designers have a distinctive mindset. The scholarship that focuses on *design cognition*--the unique mindset of designers--relates mostly to the language in use that constructs and shapes the design communication, and subsequently the design process and product. Design cognition reifies the practices of

communicating, which are governed by the vocabularies in use that characterize the cognitive state of the participating actors. By nature, the vocabularies in use stem from the deep structure of the language and its constructive properties. The link between design cognition and the formative forces that invigorate it is based in the experiences of the designer as user of similar artifacts or in closely related instances.

Designers' cognition is influenced by the gains of accumulated experience from existing artifacts and their practices of engaging with them. These practices are experienced by the designers themselves, and are also reported to them by the wider community of users. In other words, the design artifact reifies the practices of engaging, which are sensitive to the possibilities that are afforded by an artifact, and the limits that an artifact might place on the potentials for action and accomplishment that an artifact brings to the users' domain. This completes a full circle of the practices of design.

The dynamics of design are formed in response to these three situated practices: practices of engaging the artifact, practices of constructing the artifact, and practices of communicating with self and other about the artifact (Table 1). Each practice has a distinct effect on a core dimension of design. As depicted in Figure 1, the practice of engaging the design artifact shapes (and is shaped by) design cognition; the practice of communicating, in turn, shapes (and is shaped by) design dialogue, and the practice of constructing shapes (and is shaped by) the design artifact. Although our description emphasizes a clockwise directionality of primary transformations, we acknowledge the accumulated reverberating effect of counterclockwise flows going the other way. Nonetheless, we submit that these three situated practices provide the key for understanding how managers can operationalize a design attitude and incorporate it in their organizational roles.

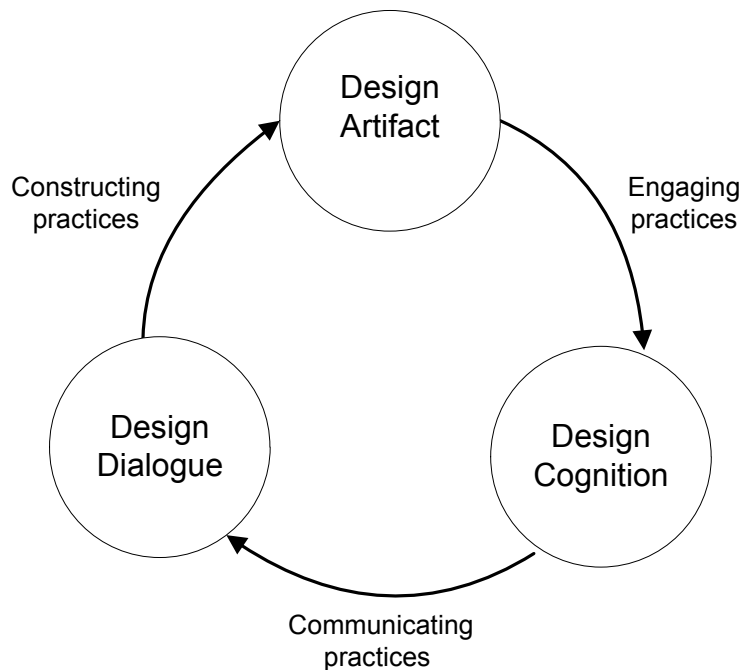


Figure 1. The practices cycle of design

Core Design Practices:	Practices of Engaging	Practices of Communicating	Practices of Constructing
Nature of Practice	Experiential	Noetic / Social	Instrumental
Driven by	Goal	Deep structure / Discourse	Style / Technology
Carrier of Subject Matter	Actors	Symbols / Metaphors	Raw Materials
Subject Matter	Use Experience	Meaning / Perspective	Potential Form / Function
Process Characteristic	Formative	Selective	Iterative-linear
Operational Effect	Shape Design Cognition	Shape Design Dialogue	Shape Design Artifact
Actor role	Tool-user	Team Player / Commentator	Tool-maker

Table 1. Juxtaposing the formative practices of design

Managing as Designing

By examining artifacts and drawings of the last Ice Age circa 30,000 BC, Alexander Marshack demonstrated that symbolic notations and visual representation are part and parcel of the origin of human thought and cognition. Human intelligence can be seen in our prehistoric ancestors and demonstrated through tools, artifacts, drawings and notation systems. To paraphrase Marshack's conclusion, "The human capacity was always there. They were just like us. We have become more technically advanced, not smarter." This suggests that cognitive activity is both analytic and synthetic in nature, and it is rooted in our deep structure. Moving between the analytic and synthetic processes is one core dynamic capability of human intelligence, and falling short of either one is likely to cripple the other. The two are interdependent, that is they are complementary and reinforce one another.

Considering the roots of civilization and the ever-present tendency of humans to invent, build and use function-specific tools, it is not surprising that we live in a designed world. Anything we do is affected by design. While some may say that the world is overly designed and too far from nature, the fact remains--design is everywhere. It is inseparable from human enterprise and it is engrained in civilization. Designing is human. Appreciating design is human. Being a competent member of a society means being acquainted with certain portfolios of design patterns and understanding their symbolic meaning and significance.

Our civilization is as powerful as our organizations. It is organized action that allows people to combine their strengths and compensate for their weaknesses, and eventually leads them to great achievements. Thriving organizations are the lifeline of social order and prosperity; failing organizations are the harbingers of social decay. That is why the current pandemic of organization dysfunction is so alarming. Regardless of sector or country, instances of organizational failure are evident everywhere--in government organizations, healthcare services, education systems, retail chains, airlines, financial institutions, and many more. Organization dysfunction is not only an internal affair; it affects communities at large and results in economic hardship, lost opportunities, despair, and cascading vicious cycles. This makes one wonder where the human capacity for intelligence and hopeful design is. The captains of today's organizations should be no less intelligent than the Cro-Magnon hunters.

An artificial imbalance between analytic and synthetic processes in management practices can explain in part our environment of organizational dysfunction. During the last century, actors that play critical roles in creating human organizations have been informed and influenced mostly by theories and practices that stem from industrial engineering and management science, thereby embracing rational choice and decision making as a primary *modus operandi*. To a large degree, this made possible the movement from agrarian to industrial economy and all related accomplishments. However, an analytic process alone, without a complementary synthetic process, hampers human intelligence. Hence, counting on rational decision making alone provides a limited capacity for guiding managers of human organization. This conclusion is corroborated by Herbert Simon's theory of limited or bounded rationality and by Amos Tversky and Daniel Kahneman's experiments demonstrating that people are not wired strictly as rational decision makers.

In modern organizational life, "management" connotes decision-making and "production" connotes design and implementation. The great divide between the manufacturing floors and the boardrooms is reinforced by two mutually exclusive vocabularies; one has to do with optimizing constraints, hedging risks and selecting among predetermined alternatives, the other has to do with envisioning new products and revolutionizing work processes. Management practice and organizational science have been colonized by vocabularies based in decision-making. The interchangeable use of the terms "managers" and "decision makers" indicates that equating management with decision-making is ingrained in the organizational ethos of its vocabularies. Building on the constructionist conviction that "words create worlds," we submit that vocabularies are not just words that signify loosely coupled discrete things. Vocabularies are the DNA of organizational life and the vocabulary-in-use is fateful. It provides the building blocks of situated discourses that turn into directives, action and subsequent outcome.

In response to this dichotomy, Boland and Collopy (2004) encourage managers and management scientists to consider the *design attitude* as an alternative to the predominant *decision attitude*. Their call comes at a time when management discourse is shifting auspiciously. A growing interest in design thinking in management is indicated by the increased number of related academic conferences, special issues and publications; funding agencies are appropriating significant sums to promote design science; and top-tier universities drum brand new D-Schools

or inject design thinking into their tired B-Schools' curricula to satisfy the demand of the job market for innovative managers with a design-oriented mindset.

As part of treating managing as designing, it has been argued that managers should adopt a design attitude, but it is less clear how they can actually apply it in their practice. Building on the earlier analysis of design, we suggest that managers emulate designers' work practices, dialogic practices and vocabularies that are in use. Managers who adopt vocabularies and practices of designers are likely to develop a wider and more systemic perspective, acquire appreciation for situated exceptional knowledge, avoid premature convergence on the first available solutions to problems in lieu of creative resolutions, and develop systemic thinking. They are also likely to become more inclusive, to open their communication and interaction patterns with peers and other stakeholders, to develop affinity for iterative processes and to find that rational analysis is not always the short path to a desired outcome.

Design with a Positive Lens

We have argued in favor of a design attitude for managers and identified three areas or core designed-related practices in which a manager can apply it. In this section, we suggest that a positive lens is particularly conducive to adopting a design attitude. Moreover, we argue that managers have focused for too long on the detection of error, treatment of dysfunctions and control of chronic problems at the expense of encouraging human strengths, nurturing human values and pursuing the potential of designing hopeful organizations and more humanly centered technologies. We submit that adopting a positive lens in our discourse and consequent action can help in designing ever better organizations and technologies.

We also suggest changing the conventional thought pattern that searches relentlessly for problems to be solved. We do not ask you to abandon problem solving altogether. But, just for now, open yourself to something else and see where it takes your work and everyday life.

The positive lens connotes a distinctive perspective on management and design that is less focused on the detection of mistakes or gaining superior control, and more concerned with positive change that involves the encouragement of what is best in humans and emphasizes a search for the conditions that increase our capacity to construct more satisfying and morally strong organizations and technologies. Applying a positive lens to design and management forms part of a larger paradigmatic movement that defines itself as a positive way of knowing (e.g., Appreciative Inquiry, Positive Psychology and Positive Organizational Scholarship.) The Positive Lens promotes management that aims to examine and enhance positive modalities in human dynamics, forms of organizing, practices, relationships, and programs of discovery and learning.

An explanation for the prevalent preoccupation of managers with malfunctions and quick problem fixes may be the presumption that success and failure are binary opposites, and consequently that any undertaking will be successful if all possible pitfalls are circumvented. However, because success is not the logical opposite of failure, the study of what went wrong

may serve those who aim to avoid failure, but it still constitutes a poor foundation for those who strive to be at their best. In other words, though success and failure are related, examining one does not teach us what we need to know about the other. Thus, research with the Positive Lens strives to explore what leads to exemplary designs rather than to prescribe preventive tactics.

One way to explain what positive design is would be to say what it is not (Table 2). Design with a positive lens implies that the design questions we use to guide us should focus on stimulating the generative core of socio-technical systems by asking what gives life to organizations - and seeking what could be, instead of searching for description and explanation by asking what is and why. Positive design focuses on desirable scenarios and visions of the future by asking what could and might be, as opposed to an attempt to predict the future by asking what will be. Most notably, the guiding questions are explicit about a conscious ethical stance and personal choice in asking what should be, and thus reject the academic ethos that extols being unattached, impersonal, and avoiding ethical controversies. Design with a positive lens implies that the approach is synthetic and value-seeking in contrast to being analytic, error-focused, and deficiency-seeking. The process of design with a positive lens is organic, iterative and open-ended in contrast to being subsumed by decision trees of design choices with a clear beginning and end. Finally, the underlying objective of positive design is about creating and maintaining virtuous cycles for the benefit of all stakeholders in contrast to preventing or escaping vicious cycles.

	Design with a Positive Lens is...	Design with a Positive Lens is <u>Not</u>...
Guiding Questions	Asking what gives life Asking what could/might be Asking what should be	Asking what is Asking what will be Avoiding challenging questions
Approach	Synthetic Emergent Systemic, Inclusive Continuous Appreciative	Analytic Deconstructive, Reductionist, Isolated, Exclusive Ad hoc Judgmental, Deficiency-seeking
Process	Iterative refinements Infinite, Open-ended, Generative Making decisions Pervasive and core-related	Straightforward linear process Finite, Close-ended, Conclusion-seeking Analyzing decision making Cosmetic
Underlying Objective	Aiming to promote virtuous cycles Triple bottom-line	Aiming to prevent or escape vicious cycles Ignoring bottom lines

Table 2. Characteristics of design with a positive lens

Discussion and Implications

The dynamics of design are formed in response to three situated practices: practices of engaging the artifact, practices of constructing the artifact, and practices of communicating with self and other about the artifact. We argued that these design practices provide the key for understanding how managers can operationalize a design attitude and incorporate it in their organizational roles. We also argued that adopting a positive lens in our discourse and consequent action could help in designing ever better organizations and technologies. In the remainder of this section, we provide some examples of how the positive lens may guide organization managers and system designers.

We use tools to extend our physical abilities--for example, a hammer or keyboard to extend a hand, a telescope or video camera to extend eyes, and smoke signals or telephone to extend voice and ears. The *practices of engaging* with artifacts play a key role in shaping one's cognition. Whether directly or indirectly, through engaging with the world around we develop our understanding about its nature and learn about its regularities. Engaging and sensemaking are interdependent. In a way, that is the core idea of the hermeneutic cycle. By engaging with an artifact we learn not only how to operate it but also what we can do that we could not do beforehand. Engaging with artifacts involves extending one's familiar capabilities, discovering new ones, and envisioning new features in artifacts yet to be constructed. Adopting a positive lens is likely to cultivate engaging practices that are conducive to self-discovery and innovation through the encouragement of improvisation and inquiry into intended and unintended features of a design artifact. Such an attitude can be cultivated in traditional quality circles where people can share experiences and discuss ideas for improvements. It can be cultivated also by allowing grassroots entrepreneurial projects such as in 3M, Apple, Motorola, and Hewlett-Packard. Another route for cultivating positive engaging practices would be the development and support of tailorable technology, i.e. systems or artifacts that are intended to be modified (by a user) in the context of use. Engaging with mutable artifacts affords an ongoing adaptation, exploration and discovery.

Communication is a rudimentary human activity that supports our inherent social nature. It is the basis of any social exchange--conversing, negotiating, trading, preaching, mentoring, learning and so on are all based on communicating with others. If tools extend our hands, eyes, feet, and so forth, then words extend our brain and mental faculties. Building on their roots in deep structure and a particular discourse, words convey intended and unintended meaning that is the core of social exchange. The *practices of communicating* play a key role in shaping one's dialogic capabilities. Adopting a positive lens is likely to cultivate communicating practices that are based on positive vocabularies and appreciative stance, the merits of which have been demonstrated time and again by Appreciative Inquiry and Positive Organizational Scholarship. Communicating practices include not only the vocabularies in use but also the conventions regarding the process of communicating. A central tenet of the positive lens is inclusion, that is the inclusion of all possible voices in a participative fashion. Whether it is a community-based dialogue or a collaborative participatory design project, their success increasingly depends on their organizers' ability to create a collaborative environment in which actors may celebrate their

differences and work with others in building a shared understanding of the systems from which both problems and solutions emerge.

The *practices of constructing* play a key role in shaping the artifact. Beyond the apparent tautological level, holding that a process shapes a product reminds us that organizations play a critical role in shaping the nature of situated work practices, which in turn shape a design process and consequently its outcome. The variety of organization types and management styles is an entry point to understanding the radical differences among various work practices that relate to forming artifacts. Adopting a positive lens is likely to cultivate artifact construction practices that seek to nurture and build on existing core capabilities, as opposed to fixing problems or closing gaps. A key principle of the positive lens is continuous improvement in lieu of major overhaul in response to crisis. Another way to cultivate positive constructing practices would be recognizing that the construction of artifacts is a process of developing mutual understanding and satisfying multiple actors. Subsequently, it encourages work practices that are based on collaborative design and co-development, which rely on the collective activity of a diversified team.

The cycle of design practices both enables and reinforces the distributed and social nature of design. Adopting a positive lens affords an affirmative design attitude at the crossroads of technology, organizations and society.

Conclusion

The positive lens inspires an alternative perception to the meaning of managing and designing. Developing and managing organizations and systems through the positive lens is likely to result in better tools, better systems, better organizations, better communities and better lives. The positive lens allows one to escape the gravity of the deficit rationality and clear the way for the development of a humanistic and relationship-driven design framework, which is based on shared responsibility, blurred boundaries, and collaborative effort. Adopting a positive lens can affect the ways managers, designers, and users frame their discourse and consequently shape organizations and information systems. We surmise that positive scholarship such as appreciative inquiry, when applied to information systems and organization design, will strengthen attention to social context, promote the use of cross-disciplinary tools, and emphasize ethical considerations associated with the act of systems design.

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