

Placing "Human-Centered Design" within a Design-Oriented Professional Discipline of Public Management

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Abstract:

What does human-centered design signify, when it is presented as an approach to public management? How would public management benefit from theorizing and researching human-centered design? These two questions provide a useful point of entry into a critical examination of human-centered design in public management. An energetic critical examination of human-centered design would consider some challenging questions about public management as a field of study. Should public management be identified as a design-science? If so, what significance should be accorded to Herbert Simon's idea that solving problems requires both designing and decision-making, within an organizational context? How should public management researchers and scholars make up for Simon's having formulated his ideas about designing and design-science after he left the fields of management and public administration? Human-centered design will be interpreted as a conceptual design for projects to achieve organizational change and public value creation and as a framework for research projects that aim to provide insight into the challenges of embodying that design in actual projects, under varying field conditions. The paper pursues this line of discussion by way of a critical examination of Dr. Sabine Junginger's recent book, *Transforming Public Services by Design: Reorienting Policies, Organizations, and Services around People.*

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This paper is a commentary on Sabine Junginger's *Transforming Public Services by Design: Reorienting Policies, Organizations, and Services around People* (Junginger 2017). I have chosen this text for discussion at this panel for a straightforward reason: this recent book appears to be a full statement of the panel topic by one of its proposers, and it does a good deal of the spade work necessary to launch a discussion of human-centered design in public management.

The exercise is an occasion to compare and contrast two perspectives on public services: those of specialists in the interdisciplinary field of design, on the one hand, and those of specialists in public administration and, more exactly, public management, on the other. Dr. Junginger represents the former; I count myself among the latter.

The discussion moves ahead as follows. In the first main section, I will engage in a dialogue with some of the framing ideas that Dr. Junginger puts across early in her book. In the second section, I examine some of the more detailed content of her book. In both sections, I undertake some diagnostic- and repair-work, in order to establish a dialogue between public management specialists and those specializing in the interdisciplinary field of design.

In my assessment, Dr. Junginger's book, *Transforming Public Services by Design*, does a good job at what it promises to do. However, the relevant question for this occasion is whether it also suits expanding professional knowledge about public organizations, as well as for strengthening the professional discipline of management. The thrust of this paper's argumentation is that the answer to this question is: not so much. Nevertheless, the dialogue is constructive, as it reveals some built-in limits to the project of expanding professional knowledge about public management on the basis of ideas about design perspectives, design thinking, and design approaches, largely on their own.

How to Argue about Human-Centered Design for Public Organizations¹

- Dr. Junginger writes:
- (1) [Recognizing] that designing is a necessity for organizations [implies that] designing [is] a core organizational activity (p. 14).

This statement accords with a view presented by Herbert Simon (1996) in *Sciences of the Artificial.* The point about the necessity of designing has undeniable merit. However, I have a reservation about using term "organizations" here. The field of management is arguably concerned with enterprises, not just with organizations. Using Fayol (1919/1984) as a precedent, claims made in theorizing management should be about enterprises, unless there is a specific reason to tie such claims to organizations, considered as aspects of enterprises.

Dr. Junginger (in effect) says:

¹The precedent for this section title is Barzelay (2000, 2001).

Recognizing that designing is a necessity for enterprises implies that designing is a core enterprise activity. Enterprises, in turn, need organizations that are capable of designing.

- Dr. Junginger writes:
- (2) The public sector is an area that constantly engages in design. Services are developed and delivered, policies created and implemented. Yet we seem to know very little about designing in this key area that shapes and impacts the lives of millions of people. This book explains how design activities, design methods, design practices and design principles apply to the public sector (p. 3).

This statement would ordinarily be taken at face value. However, it brings to light an important issue about the character of inquiries such as *Transforming Public Services by Design*. Note that the first three sentences are written as if the public sector and its policies, programs, and services are sort of spontaneously-occurring, nature-like phenomena, about which science remains embarrassingly ignorant. By contrast, the fourth sentence is written as if the public sector consists in artificial systems created by intentional action– the stuff that Herbert Simon (1996) called artificial phenomena. It's presumably the case that Dr. Junginger's inquiry is committed to Simon's idea of sciences of the artificial – in which case, the first part of Statement (2) is incongruous.

The problem can be repaired by rephrasing the statement along the following lines:

The public sector can be theorized as a multitude of enterprises, called public organizations (Moore 1995). In effectuating their intent, public organizations develop programs and services, as well as operate them. Design-oriented theories of public organizations take the source of novelty in programs and services to be design-projects, an idea that comes from Herbert Simon's theorization of innovation, professional practice, designing, and decision-making (Simon 1996). In this theory, design-projects are critical function-features and enterprise's development of locally novel enterprise-mechanisms, whether systems or other creations. The designing part of design-projects is constituted by reciprocally or directionally enabling relations among analysis, synthesis, and testing – the constitutive functions of designing within design-projects. While Simon's theory of designing is often celebrated, it's not much read or used. But it does provide a basic structure for debate about the worth of ideas about how to effectuate the intent of public organizations or other forms of enterprise. We need a book that takes this debate forward.

As you can see, this statement is consistent in theorizing the public sector as an artificial phenomenon: it avoids the stray idea that the public sector is a nature-like phenomenon, whose hidden patterns have yet to be discovered. Under this thorough-going, Simonian idea, the public sector is an artificial phenomenon, just as is the case for public organizations, programs, and services.

Dr. Junginger writes:

(3) Since their intent is to accomplish something for people – both for the individual and society as a whole – we can argue that public sector design in principle is human-centered (p. 12).

She also writes that:

(4) This book demonstrates how the principles of human-centered design can help us generate valuable and actionable insights. In a short amount of time, requiring comparatively few resources, they generate new ideas that can lead to novel and sustainable solutions (p. 4).

These statements are significant in that they exhibit Dr. Junginger's theory of humancentered design and, specifically, its pattern of argumentation and conceptual organization. A concern about these statements is that they sit uneasily together. In the first statement, humancenteredness is an *inherent property* of program-and-service development, while in the second statement, human-centeredness is presented as a *superior approach* to performing that same function. How can the same idea be inherent to performing a generic function and, also, be a distinct approach to performing it? This equivocation suggests that the argument is not altogether of a piece (or at least strays from some ideas about how to argue about designing enterprises).

Focusing now on the second statement, it's important to know how a human-centered approach to program-and-service development in public organizations compares and contrasts with other approaches to performing the same function. Consider the idea of "novel and sustainable solutions." The notion that performing the program-and-service development function is *for* generating novel solutions is such a conventional idea about designing that it would not seem to be specific to the human-centered approach. So it's a bit hard to tell whether the aim of this discussion is to establish the idea that designing is important to public management, or whether the aim is to establish the specific idea of human-centered design. A reasonable suspicion is that the aim is essentially the former: that's fine, but then why signal that human-centered design is a specific approach, different from others that are relevant to effectuating the intent of public organizations?

Let's now focus on the idea of "generating *valuable* and actionable insights" (emphasis added). If there's something specific about the human-centered approach, it presumably concerns what makes an insight substantively valuable. However, what would be considered substantively valuable turns on how the intent of public organizations is theorized. This discussion puts a pivotal meta-issue on the table. How is the idea of design – whether or not the specific one of human-centered design -- to be coordinated with the idea of public organizations and their programs and services?

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Examining Human-centered Design from the Standpoint of Public Management

Let us examine some lines of discussion in Dr. Junginger's book that theorize public organizations generally, as opposed to theorizing designing – i.e., the creation of novel mechanisms within public organizations, more specifically or narrowly.

- Dr. Junginger writes:
- (5) Designing [is] one of four core organizational activities, that is, [it is] an activity inseparable from changing, organizing and managing (p. 12).

Examining this statement leads one to engage with issues of how to theorize public organizations as artificial, purposive phenomena. A basic issue is whether Dr. Junginger's book uses the idea of an *activity* in a manner suitable to purposive theorizing of public organizations or other forms of enterprise. Absent a countervailing argument, the idea of an activity should be constrained by a commitment to the idea that enterprises effectuate their intent by developing and operating dynamically linked assemblages of mechanisms that collectively perform an enterprise's multiple, mutually enabling functions, to a sufficient extent. This intellectual commitment -- which I call mechanism-intent thinking about enterprises (MITE)² -- is plainly rooted in Fayol's *Industrial and General Administration* and carried on by contemporary works, such as Michael Porter's (1985) theory of firms, presented in his *Competitive Advantage*.³

The question, then, is whether the term "designing" in Dr. Junginger's Statement (5) accords with mechanism-intent thinking about public organizations and other forms of enterprise. I don't think so, because Dr. Junginger's theorization doesn't recognize that ideas about designing and purposive theories of enterprises have not really been put into a coherent whole. A specific question, then, is how does "designing", as a feature-function concept, relate to "managing" and "organizing" – other terms on Dr. Junginger's list in Statement (5). If you go back to Fayol's purposive theory of enterprises, you won't find a single "conceptual slot" (Fillmore & Baker 2010) for designing. You can find a slot for "planning" of the enterprise-mechanisms for production: it's the technical function. You can find a slot for the development of enterprise-mechanisms for transacting with customers: it's the commercial function. In

²Barzelay, in press, chapter 3.

³Porter's (1985) purposive theory of firms uses the label "value-activities" to refer collectively to production, sales and service, research and development, procurement, and other parts of an enterprise's value chain. Value-activities in Porter's purposive theory of firms are similar in concept to the functions within Fayol's theory of enterprises, where the functions were labeled as technical, commercial, management, accounting, finance, and security. Porter uses the label "value-chain configuration" in theorizing the how a firm's value-activities – i.e., their functions -- are performed. Accordingly, a value-chain configuration/value-activities relation is that of features and functions, respectively. Both Fayol and Porter are examples of purposive theories of enterprises that are organized conceptually along mechanism-intent thinking lines.

relation to this purposive theory, designing has one-to-many relation to enterprise-functions, with none of these relations being particularly clear.

To create a clear place for "designing" in purposive theorizing about enterprises, you can exploit Herbert A. Simon's (1996) *Sciences of the Artificial*, especially Chapters 1 and 5. In that context, designing is a feature-function concept; one that is distinct from another feature-function concept: namely, decision-making. The two concepts form part of a working-whole, which not only creates representations of -- and information about -- would-be enterprise-mechanisms (which is the functional role of designing), but also makes collective decisions about whether such representations are to be realized (which is the functional role of decision-making). Simon doesn't provide a name for this working-whole idea, with designing and decision-making being constitutive function-feature concepts. The label I use for this idea is the design-project (Barzelay, in press, chapter 2).

What needs to be done for purposive theorizing of enterprises is to bring Fayolian mechanism-intent thinking together with Simonian mechanism-intent thinking. It's not easy to do that, because of the lack of congruence between the conceptual organization of Fayol's purposive theory, on the one hand, and Simon's idea of a design-project, on the other. Bringing Fayol and Simon together means, as a practical matter, keeping them alongside one another. Dr. Junginger's Statement (5), however, doesn't do that. It says, by contrast, that we can just think of designing, managing, and organizing as if they were on the exact same list of feature-function ideas in the field of management. That theorization hampers the development of the field of management as a design-oriented professional discipline (Barzelay, in press, chapter 8).

Dr. Junginger's Statement (5) might be reformulated thus:

Designing is an idea with an important role to play in theorizing public organizations and other forms of enterprise. But that that role is, needs to be specified. What's true of any enterprise-function – such as managing and production -- is that it is performed by enterprise-mechanisms. What's true of any enterprise-mechanism is that it has a source. A purposive theory of enterprises influenced by Herbert Simon holds that the source of enterprise-mechanisms is design-projects. Designing is a feature-function idea about design-projects. The function is to create representations of, and information about, not-yetimplemented, locally-novel, enterprise-mechanisms. Within this feature-function idea is an elaboration of constitutive functions of designing: for Simon, these are analysis, synthesis, and testing. How these constitutive functions are performed, in serial or parallel combination, is down to the enterprise-mechanisms used to perform the design-function. There's a lot of interesting, purposive theory-like ideas about feature-function relations between the enterprise-mechanisms and the performance of the design-function, making designing an important topic for purposive theorizing of public organizations and other forms of enterprise.

Does this reformulation do an injustice to Dr. Junginger's theorization of designing within enterprises? Consider that she writes:

(6) Designing, understood as the conceiving, planning, developing and delivering of plans, strategies, services or policies, always requires us to initiate or make changes to some 'thing'....The recognition that designing is a necessity for organizations assigns designing the role of a core organizational activity.... Designing, changing, organizing and managing are interdependent activities that constantly interact in organizational life. Together, [the core organizational activities of designing, organizing, and managing] enable the organization to conceive, plan, develop and deliver plans, strategies, services and policies suitable for achieving organizational goals and intent (p. 14).

The statement coheres with the idea that enterprises effectuate intent: a bedrock element of purposive theorizing of enterprises. We can see that she offers a collection of terms to fit into the "conceptual slot" of enterprise-mechanisms, including services and plans. We can claim agreement on a statement that the idea of design-projects is an essential aspect of purposive theories of enterprises and, accordingly, that professional practice within public organizations needs to be concerned with design-projects, and that a professional discipline of public management has to be acutely attuned to the challenges of design-projects within public organizations.

Dr. Junginger writes:

(7) I want to provide access to material that complements and makes sense of the many design-driven methods that currently keep our heads spinning....I do not discuss specific methods but rather seek to explain the design approaches organizations do and may pursue as they go about their business. My aim is to show how different design approaches work with different design methods to achieve strategic outcomes....If successful, the book [will serve] as a foundation for those who seek to develop sustainable design practices tailored to policy making and policy implementation (pp. 4-5).

I understand this statement to say that Dr. Junginger intends to discuss design-projects within public organizations, examining variety of views about this distinct feature-function idea within purposive theorizing of enterprises. I understand that she will be using such terms as "design approaches", "design methods", and "outcomes" in presenting these varying views. An immediate benefit of the exercise is that our heads will stop spinning: we will get our minds around important issues of professional practice. And a further benefit will be to align professional practice with the challenges of policy implementation. There's much to agree with here.

Dr. Junginger adds:

(8) We need to change the ways we think about design in these important areas, but also introduce new design principles, practices and methods (p. 8).

I take this to mean that the current base of purposive theorizing about the feature-function idea of designing, within the professional discipline of public management, is deficient. By examining purposive theorizing tied to the idea of human-centered design, the book promises expand on that base in ways that make it less deficient. That sounds good.

Dr. Junginger writes:

(9) A design perspective can help transform the ways policies are being developed and implemented (p. 29).

This statement includes a term that hasn't been discussed so far here: "a design perspective." In my view, this statement gives off an impression that a design perspective is a *magic word*. It's the kind of statement that turns academics off from purposive theorizing about public organizations and other forms of enterprise!

Dr. Junginger positions human-centered design in opposition to the idea that government engages in problem-solving by way of formulating and authorizing public policies. Specifically:

(10) Policies in problem-solving are not so much tools to create future experiences but rather tools to regulate experiences of the past. We might say that 'the' problem shapes our policy-making and our lives because we only begin to shape policies that shape our lives in response to this problem. Second, the dependence on 'a' problem encourages policies to be developed in isolation from their larger contexts. Third, the problem-solving approach teaches policymakers to take action only when policymakers themselves are prepared to recognize a problem to be a problem....Policy design driven by problemsolving does not lend itself to envisioning and inventing futures. It does not encourage or enable us to develop innovative policies towards achieving more desirable futures (p 33).

There may be merit to the idea that *remedial styles* of problem-solving are inferior to *inventive styles* of problem-solving. Indeed, that kind argument can be seen in sources as diverse as Levitt and March's (1988) distinction between exploitation and exploration and the theory of inventive problem-solving (Terninko, Zusman, & Zlotin 1998). There is a well-established tradition of comparing different styles for performing *identical, or similar, functions*: to wit, the incremental v. root-and-branch styles of problem-solving set out in Lindblom's (1959) 'Science of Muddling Through.' What's not so common is to let the ground of the discussion shift, so that what is effectively being compared is (a) problem-solving in policy-making and (b) problem-solving in public management. The issue here is really how to do purposive theorizing in this domain.

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Dr. Junginger writes:

(11) Policy makers and public managers...have to design and redesign institutions for which they have to design procedures and structures. They have to be creative with using their resources in ways to fulfill their organizational mandates just as much as they have to care about achieving outcomes and fulfilling policy intent....The introduction of design thinking as a concept allows us to talk about and to reflect on existing design practices, design methods or design principles employed in the development of policies and public services....Design thinking in this sense is about taking a stance, about developing a new attitude towards policy issues to generate new possibilities for public sector innovation....Design thinking...enables us to hone new skills and new practices that advance our abilities to arrive at better and more effective outcomes, overcoming the weaknesses of our current, often unreflected design practices and methods (p. 33).

There is much to agree with in this statement. Regarding the first two sentences, a clear precedent is Moore's *Creating Public Value*. What differs from Moore's text is the vocabulary of design thinking. Whether that is a difference in substance or rather a difference in labelling is a not a straightforward question: it depends on what idea is labeled as design thinking. If design thinking is an "attitude towards policy issues to generate new possibilities for public sector innovation," then design thinking is the same idea as what Moore calls managerial creativity, an aspect of his purposive theory of professional practice in public organizations (labeled as strategic management government). If design thinking is an approach to design-projects, then design-thinking is a different idea than Moore's idea of managerial creativity.

The "ground" of the idea of design thinking is not identical to the ground of designprojects. The ground of the idea of design-projects is enterprises, while the ground of the idea of design thinking is professional activity and professional ability. I think Dr. Junginger shifts the ground from enterprises to professional activity and professional ability, given this phrasing: "Design thinking...enables us to hone new skills and new practices that advance our abilities to arrive at better and more effective outcomes." If human-centered design concerns both public management as enterprises *and* professional practice within them, then a theory of humancentered design in public management should treat these matters distinctly. Otherwise "designing" becomes a magic word.

Dr. Junginger writes:

(12) All design thinking processes share that they are iterative and emerging. These characteristics distinguish design thinking from many design processes in place in the public sector that follow linear and deterministic approaches. The

emergent characteristic means that the design problem is not understood or stated when the design process begins (p. 33).

Here, the following two issues arise. First, the statement is mobilizing an opposition between a *purposive theory* of problem-solving, on the one hand, and a claimed *empirical pattern* in problem-solving, on the other. The former involves the notion that ideas about solutions, i.e. enterprise-mechanisms-to-be-created, should be emergent during an episode of problem-solving, while design-projects – including their feature-function of decision-making -- should allow for iteration. Should purposive theories be built on their opposition to disvalued empirical patterns?⁴

Second, there's an interesting set of issues about how the context of government makes it difficult for design-projects to allow for iteration and for some of their participants (especially higher authorities) to welcome "emergence". In other words, what's at issue is how such handicaps within design-projects can be neutralized by some of the features of design-projects as well as by specific lines of authoritative and dramatic action within problem-solving episodes (Barzelay, in press, chapter 7). This issue is germane to a discussion within Dr. Junginger's book concerning innovation labs in government, though it's not evident to me that it is focused on what ideas, context, and features tend to act as countervailing forces against the consequences of conditions that stereotypically handicap design-projects and the enterprise-function they perform.

Concluding Remarks

The clear theme of the present paper is that Dr. Junginger's purposive theory of public organizations is of substantive interest, but it doesn't expand professional knowledge about public management to a significant extent. A reason is that it is distant from more elaborate substantive arguments about public organizations with which it fits (like Moore's book); another is that it lacks an approach for public management developing along the lines of a science of the artificial that is appropriate to artificial phenomenon being enterprise-like.

All that said, I would wish to close on two points of emphatic agreement with what Dr. Junginger has written. The first is that:

(13) Because services are central to policy intent, policy making and policy implementation but also central to how people experience government and interact with public organizations, they are a place from where we can start to innovate and transform the public sector around people. It is therefore time for services and the design of services to be included in policy research and policy work. Policy makers and policy-implementers eager to arrive at citizen-centric policies and meaningful public services need to familiarize themselves with new design processes, design practices and design methods. Above all, they need to find ways to broaden their design thinking beyond the one they are currently applying (p. 42).

⁴I remember a graduate school seminar about democratic theory, during which Robert Dahl answered an analogous question with an emphatic "no".

And, the second is that:

(14) We need a more nuanced design discourse concerning matters of design in government (p. 8).

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