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Insights from Integrating a Design Attitude Approach to the Innovation Ecosystem of International Development

Innovation for development identifies new ways of "doing things differently that add value" and advocates for thinking outside the box to reach equity. In a context of great urgency and circumstances with high stakes, innovation approaches to development are translating into new policies and concrete initiatives that provide new modes of practices, experimentation, open source collaboration, and transparency.

UNICEF has embraced the innovation agenda with substantive organizational commitment: it is core to the current strategic plan and includes clearly defined principles and metrics to safeguard the welfare of the world's 2.2 billion children. The UNICEF Innovation Unit is at the center of UNICEF's innovation ecosystem and facilitates initiatives that leverage technology, human-centered design, and partnerships with the private sector and academia.

This paper highlights salient findings from a 2014-2015 ethnographic study with the Innovation Unit, conducted as part of the author's examination of the "design attitude" construct (defined as a holistic conceptualization of the unique abilities and capabilities that professional designers espouse as they problem-solve) in the social innovation field. The present analyses extend the findings from that original doctoral study and offer new insights about the opportunities, challenges—and undisputable value—of integrating a design attitude approach to innovation for international development.

Keywords: design attitude, ethnographic case study, organizational culture, innovation for international development.

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Introduction

Innovation for international development identifies and supports new ways of "doing different things," "doing things differently that add value" (UNICEF, 2014: World Bank 2014) and advocates for thinking outside the box to reach equity (UNDP, 2014). In the international development sector, innovation is defined as "the successful exploitation of new ideas that create value at scale" (Ramalingam and Bound, 2016, p.11) and represents a rapidly growing field. Confronted by profound political, economic, social and technological transformations and an exponential increase in humanitarian crises, aid agencies and nongovernmental organizations that lead development efforts are operating in an entirely new global context for decision-making, one that is altering long-standing assumptions and institutional logics (World Economic Forum, 2015) and generating a new readiness to embrace innovation activities. There is a fast-evolving recognition that governments and aid organizations acting alone cannot meet the rising demands and sheer complexity of improving the lives of the poorest and most vulnerable populations worldwide. Amid an environment defined by a humanitarian mandate of great urgency and circumstances with high stakes, innovation is translating into new policies as well as concrete initiatives that provide new modes of practice, experimentation, open source collaboration, and transparency. With a sense prevailing that an innovation fever has broken out (Murray, 2014), new job titles such as "Chief Innovation Officer," and divisions labelled with the ambiguous "innovation" buzzword are manifesting throughout organizational structures.

This paper highlights salient findings of a 2014-2015 ethnographic study with the Innovation Unit (Amatullo, 2015), conducted over an eight-month period as the third empirical study in a mixed-methods dissertation that examined the "design attitude" construct (defined as a holistic conceptualization of the unique abilities and capabilities that professional designers espouse as they problem-solve) in the social innovation field (Amatullo, 2015b). The present analyses extend the findings from that ethnography and offer new insights about the opportunities, challenges—as well as the undisputable value—of integrating a design attitude approach to innovation in international development.

The paper is organized as follows: Part One introduces the key theoretical lenses that form the backbone for the author's interpretations and an overview of the Innovation initiatives at UNICEF. A Methods section then briefly describes the research setting of the Innovation Unit at UNICEF,

as well as data collection and data analysis carried out during the ethnography. Part Two provides a synthesis of the key findings of that study and the critical themes that emerged from field observation. Part Three offers a discussion section that extends these findings with new evidence of the significance of design in the innovation ecosystem of international development.

Part One: Theoretical Lenses

By focusing on the processes and practices that characterize the projects and programs of UNICEF's Innovation Unit, the research purpose of the author's ethnography was to further understand how "design attitude" approaches—a set of abilities that impact innovation and organizational learning (Boland & Collopy, 2004; Boland, Collopy, Lyytinen, & Yoo, 2008; Buchanan, 2008; Michlewski, 2008)—could be discerned within the innovation agenda of UNICEF, and at an organizational level of analysis.

The first question was to probe how design attitude and its dimensions manifest within projects undertaken by the unit, and the organization at large. Another objective was to map the manifestation of salient design attitude to processes of innovation at UNICEF's organizational level. Ultimately, developing actionable theory about the relationships of design to collective human agency and innovation were the overall impetus for the study.

A comprehensive literature review of design, organizational theory and institutional logics helped frame the study with multiple streams and theoretical lenses that formed the backbone for this research. These streams are articulated briefly below.

Design as a Knowledge Domain and Design Attitude

The study's interpretations of how design attitude manifests and exerts various levels of influence within the organizational context of UNICEF was informed by Richard Buchanan's four orders of design (Buchanan, 2001). This is a classification that posits design as a knowledge domain defined as a concrete and deeply humanistic activity that touches communication symbols and artefacts, products, environments and systems (Buchanan, 2009). The research was also aligned with contemporary streams of design discourse that point to design practices that exist in increasingly complex organizational settings, interdisciplinary and collaborative contexts of use (Binder et al, 2011; Jégou and Manzini, 2008; Staszowski and Manzini, 2013;

Manzini, 2015) where there is an increasing validation of design's generative capacity to act as a mediating discipline. Insights from participatory and cocreation methods, and new notions of stewardship that result in reframing of opportunity spaces for innovation and actionable outputs, are particularly relevant to the study (Boyer et al.; 2013; Buchanan, 2008; Kimbell, 2009).

Design attitude as a multi-dimensional construct is core to the UNICEF ethnography. An important guiding lens was the foundational research of Boland and Collopy, who coined the term by defining it as "expectations and orientations one brings to a design project" (Boland and Collopy, 2004, p.9). This conceptualization highlights designers' capabilities as a distinct set of heuristics that "fosters an acceptance of and comfort with a problem-solving process that remains liquid and open, celebrating new alternatives as it strives to develop a best design solution" (Boland and Collopy, 2004, p.10). One of the important implications of a design attitude approach to problem-solving is that it allows designers to be agile under constantly evolving circumstances, leading to outcomes that are not necessarily envisioned at the onset. This approach is opposed to a decision attitude, which Boland and Collopy argued is dominant in management practice, and assumes that the alternative courses of action are ready at hand, or at the very least readily obtainable (Boland and Collopy, 2004).

Kamil Michlewski's extension of the construct in his empirical research of the culture of designers in innovation and design consultancies (Michlewski, 2007, 2008), as well as his identification of five key dimensions of a design attitude, provided a key scaffolding for this author to operationalize design attitude (with the concepts of "ambiguity tolerance," "creativity," "engagement with aesthetics," "empathy," and "connecting multiple perspectives" (Amatullo, 2014). The predictive validity of design attitude in the dissertation's quantitative study was further investigated in the organizational innovation setting of UNICEF as part of the ethnography.

Organizational Culture

The ethnography of UNICEF treated the Innovation Unit as a culture producing milieu (Singh and Dickenson, 2002), and examined the complex dynamics that can occur within organizational cultures that are experiencing rapid change across organizational boundaries. In the study, the contested concept of culture was considered as a root metaphor for a pluralism of human beliefs, expression and everyday behaviour in organizational life (Smircich, 1983; Martin, 2002a). The study was informed by Edgar Schein's functional definition of organizational culture as a learned product of a

group experience based on a set of values, norms and assumptions (Schein, 1996). It was further informed by the scholarship of Joanne Martin and her in-depth examination of organizational cultural frameworks across a number of varied configurations. Martin's notion that "cultural manifestations of a group's set of values, norms and assumptions include formal and informal practices, organizational stories and rituals, jargon and language, humour, and physical arrangements" (Martin, 2005) provided an important insight for analysis.

Another stream of theory that was influential is the symbolic perspective of culture that informs the work of anthropologist Clifford Geertz (1973) and more recent cultural anthropology studies (Clifford and Marcus, 1986; Fortun, 2012) and ethnographies in workspace contexts (Van Maanen, 1979a, 2011; Van Maanen and Barley, 1982). These theorize about culture as something continually under social construction in time and space. Finally, Welsh cultural critic Raymond Williams' concept of *emergence* within an organizational environment—a concept that refers to the process of coming into being or prominence "where new meanings, values, practices and new relationships and kinds of relationships are continually being created" against dominant and residual cultures (Williams, 1977, p 125)— also represented an important guidepost to the analyses of the emergent phenomena underway at the Innovation Unit.

Institutional Logics

The institutional logics perspective served as a meta-theory and as a method of analysis in the study. The concept is defined as the socially constructed, historical patterns of material practices, assumptions, values, beliefs and rules by which individuals produce and reproduce their material substance, organize time and space, and provide meaning to their experiences and social reality (Thornton & Ocasio, 1999). This definition links the notions of individual agency and cognition of institutional actors with socially constructed institutional practices and rule structures (Thornton & Ocasio, 2008). The institutional logics framing allows us to zoom out from interpreting the actions and perspectives of the individuals interviewed, who are at the generating or receiving end of innovation initiatives. The concept helps relate these insights to macro-level organizational forces that alternatively facilitate, or constrain, how innovation might advance across the organization.

The concept of "the paradox of embedded agency," within institutional logics literature also played an important part in the study's theorizing. The

notion alludes to the tensions or contradictions between individual agency and forces that answer to institutional structures (Seo and Creed, 2002). It addresses a key puzzle in institutional theory by explaining how individual actors can provoke change in institutions despite their actions, intentions, and rationality being conditioned by the very institution that they wish to change (Holm, 1995; Thornton and Ocasio, 2008). The tension inherent in this push-and-pull dynamic often surfaced in the insights culled from the study.

Innovation Initiatives at UNICEF

The Innovation unit at UNICEF, the principal arm of UNICEF Innovation, is tasked to carry out the UNICEF innovation mandate and confront the complexity, fragility, and uncertainty that characterize a new era of global cooperation where assumptions about aid and development are being profoundly redefined (Banerjee, Banerjee, & Duflo, 2011; Collier, 2007; Easterly, 2006; Easterly & Williamson, 2011). As a relatively young and entrepreneurial division within the organization—only established in 2007 and reporting to UNICEF's Executive Director office since December 2013 the Innovation Unit is comprised of an interdisciplinary core team of approximately twenty individuals at UNICEF headquarters in New York and in San Francisco, who in turn collaborate with a larger innovation team of more than one hundred who are distributed globally. Their innovation practices leverage technology, partnerships with the private sector and academia, and—importantly, given the research focus of the ethnographic study—integrate design to make an impact while operating in some of the world's most difficult environments (UNICEF Innovation, 2014).

As the principal unit of analysis of the ethnographic study, the New York unit is one of the core organizational components of what its co-founders and UNICEF describe as "the larger UNICEF Innovation ecosystem" (Fabian in unpublished interview with author). The mission of the Innovation Unit is to support UNICEF programs in finding solutions for the world's most vulnerable children through identifying, prototyping and scaling technologies and practices that strengthen UNICEF's work globally and across more than 135 country offices globally. This mission is situated within a larger international development context that emphasizes the need for partnership with the active involvement from civil society, commercial enterprises, and private non-commercial actors including academia and social entrepreneurs, to create new models for the delivery of public goods and services that are user-centered and aim to eliminate inequities at a

global scale (Ramalingam et al, 2016). For the Unit, many of its successful innovation "products" to date have been open-source technologies and platforms that offer new mechanisms for UNICEF to access information and data in real-time in order to provide aid and respond to emergencies in fundamentally different ways than it ever has before. Examples of these innovations include *U-Report* (a youth engagement platform based on Rapid SMS technology, originally deployed in Uganda to engage young people in civic life) or m-Hero (Mobile Health Worker Ebola Response and Outreach) launched at the height of the Ebola crisis in Liberia in fall 2014. Both products are applications of Rapid-Pro (an open-source platform for international development that allows customization and easy interface with mobile devices without the need of software developers). The development and launch of Rapid-Pro was studied closely as part of the original ethnography (Amatullo, 2015) and offered a rich opportunity to collect and interpret data for the study. Beyond their focus on open-source technology the Innovation unit team is constantly evolving its portfolio of initiatives as becomes apparent from a comparative analysis of their annual reports. All initiatives, however, follow a set of nine innovation principles that are very close to design-driven precepts as well: for example designing with the user, or taking on a collaborative approach (Fabian and Amatullo, 2016).

Methods

Research Design

The ethnographic approach guided a phenomenological and predominantly inductive research strategy for the study.²

The Innovation Unit at UNICEF's New York headquarters was the primary research setting and principal unit of analysis. The researcher had privileged access through a long-standing set of collaborations with the Unit's cofounders that dated back nearly a decade. This relationship of mutual trust

¹ The website "UNICEF Stories of Innovation," captures the key initiatives of the UNICEF Innovation team and includes sections with the annual reports (http://www.unicefstories.org/about/reportsandbrochures/) and principles (http://www.unicefstories.org/principles/).

² For comprehensive analyses of the methods and data collection of the ethnography including charts with evidence of the coding processes, interview protocol and graphs, please see the original study (Amatullo, 2015).

facilitated access to highly placed informants, as well as immediate credibility for the study among members of the UNICEF Innovation team, thus allowing adherence to the key principle of ethnographic authenticity (Clifford, 1983). The selection of the Innovation Unit as the research setting also exemplified a revelatory, extreme single case (Yin, 2014), which is conducive to theory building because phenomena are closer to the surface and easier to observe (Eisenhardt, 1989; Pratt, 2009). The Innovation Unit represented a privileged opportunity to observe firsthand a dynamic set of activities and events in a unique organizational context where innovation and design activities were intersecting in multifaceted ways.

Data Collection

Data collection occurred over a period of eight months, between June 2014 and January 2015. It consisted of the author's in-situ immersion in the Innovation Unit for field observation and field notes; a three month process of shadowing of one of the distributed global teams in person and over weekly calls during the design and development of a technology and communication innovation initiative of the Unit known as Rapid-Pro; 21 semi-structured and informal interviews; and the analysis of extant documents and technological artefacts produced by the Innovation Unit and other divisions of the organization. The ability to gather evidence from these multiple data sources addressed potential problems of validity from inferences in the ethnography, allowing for triangulation of insights across different data points and leading to findings that converged from multiple and independent observations (Eisenhardt, 1989; Yin, 2014).

Data Analysis

The ethnography integrated a grounded theory approach of comparison and contrast (Strauss & Corbin, 1990). Advancing new meaning of the phenomena under examination and giving voice to informants by maintaining a high degree of reflexivity about the asymmetries that occur between observer and observed were core objectives of the research approach. The inquiry necessitated the openness to engage in a recursive process of back-and-forth for analysis: i.e. an iterative cycle between surfacing initial concepts in the data, grouping them into categories (open coding), and reviewing them against relevant literature in order to progressively build and refine the theoretical categories of the study. Conceptual coding integrated "in-vivo" codes (i.e., language used by the participants that was associated into first order codes (Van Maanen, 1979)).

The study also drew upon a strategy of thematic coding (Boyatzis, 1998) informed by the key concepts related to design attitude brought from prior quantitative data in the dissertation. For example, key dimensions of design attitude, ones that were found to be statistically significant and accounted for positive social innovation outcomes in the quantitative research were integrated in the interview protocol of the study and probed for relevance. In a second step of analysis, axial coding of the data (Strauss & Corbin, 1990) resulted in second-order themes that developed more abstract descriptions of the phenomena observed (Fortun, 2012). Following rigorous ethnographic methods, the reporting and presentation of the data strove to 1) honour the worldview of informants; 2) provide sufficient evidence for claims; and 3) contribute to extant theory (Pratt, 2009).

Part Two: Findings

The study's findings were organized in three subsections. The first provided a contextual overview of the Innovation Unit that focused on a "thick description," a phrase coined by Geertz in 1973, of the structure and program foci of the Unit, emphasizing some of the unique entrepreneurial characteristics of its culture vis-à-vis UNICEF overall. The second subsection explored how design attitude dimensions play out within the Innovation Unit to advance innovation for UNICEF at the organizational level. For example, an important objective was to better understand how the guiding principles of the Unit related to human-centred design tenets and to what extent they were leveraged versus obstructed within the organization overall. Finally, the third subsection identified macro level factors, such as notions of legitimacy, accountability and urgency that are heavily weighted in the context of designing at UNICEF. These themes emerge as important drivers of how innovation activities take place within the institutional logics of UNICEF and help explain how one of the most established innovation units in the development sector has worked to influence a large international bureaucracy (Fabian and Amatullo in Ramalingam et al, 2016).

The salient findings from the ethnography can be synthesized as follows:

The Innovation Unit functioning as "ground zero" for Innovation at UNICEF

There is an unquestionable entrepreneurial outlook and "start-up" subculture environment (Martin, 2002) that characterizes the staff make-up and operations of the Innovation Unit. The ethnography allowed the author

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to get an in-depth understanding of the importance that the nine guiding principles for innovation at UNICEF have in terms of their role in providing clear metrics and new norms for practice (Fabian and Amatullo in Ramalingam et al, 2016). The study's analysis of the data also resulted in the articulation of key attributes (relative autonomy and cross-cutting position of the Unit vis-à-vis hierarchy and organizational structure of UNICEF, demographic composition of the team, and entrepreneurial characteristics of its operations) that contribute to the creativity and innovation capacity of the Unit overall. The Innovation Unit's proclivity toward agency and the creation of new value for the organization revolves around three main actions: 1) the development of new products, processes and ventures; 2) a boldness for experimentation driven by an intrinsically motivated staff; and 3) calculated risk and "opportunity-focused" initiatives to leverage change and support innovation across the organization overall (Drucker, 1985). Figures 1 through 3 below are schematic visualizations³ that synthesize key words with a representative statement from the coding of the data across interviews of informants and field observation.

3

³ The author is grateful to the opportunity to have collaborated with Mari Nakano, Visual Strategy Lead, UNICEF Innovation to develop these visualizations, which were produced for a presentation and panel discussion of the research insights from the ethnography at UNICEF headquarters in New York in July 2015.

EXPERIMENTATION

"So we're looking at the spaces where we don't have all the answers yet and the industry doesn't have all of the answers, but we see tremendous potential."

Innovation Co-Lead, Erica Kochi



Figure 1 The visualization above offers a synthesis from the data collection in the study of the importance of experimentation to advance UNICEF's innovation mandate.



"The fail-fast, fast-fail-early philosophy that we apply to the specific innovation projects we need to also apply the philosophy to the management overall of the innovation program [in the organization]."

Deputy Director, Executive Director Office, UNICEF



Figure 2 The visualization above offers how a design attitude approach to the innovation work of UNICEF's Unit is necessary and being effectively leveraged.



"Innovation implies a much more sophisticated understanding of risk, the ability to accept a certain level of risk and to justify the gains that come from it."

HR Strategy Lead, UNICEF



Figure 3 The study's data showed that the ability to incorporate calculated risk and accept failure is an important part of design approaches to innovation that are now integrated and valued in the innovation ecosystem of UNICEF.

Integrating Design as a Strategic Tool for Change: A Complex Push and Pull

The ethnography offers a comprehensive analysis about the various modes and degrees of integration of innovation practices with design and design attitude approaches to problem-solving that manifest in the Unit. An important focus of the study was to locate the range of understandings that exist in the organization about design as a deeply humanistic capability that may amplify innovation. There is evidence from the data pointing to a wide range of perceptions about, and reactions—both adherence and advocacy, but also suspicion—to the value of design within the organization. For example, the central, integrated role of design in the Innovation Unit seems to emerge clearly as a capability and cultural value embedded in the unit. Not surprisingly, however, it often appears less understood in other divisions of the organization. From this variation, there are significant insights from the data that emerge about what the study terms "wins" and "limitations" of the agency of design, as well as the impact human-centered design approaches are having in the organization. So although the design attitude abilities of ambiguity tolerance, empathy and connecting multiple perspectives transcend as critical to advancing the innovation work in the organization, organizational structures and traditional business often question the power and legitimacy of design in their midst. Figures 4 through 7 are schematic visualizations culled from the coding of the data that capture these varied dynamics.

AMBIGUITY TOLERANCE

"The ability be agile and flexible much more than we are is going to be a survival, a critical success factor for the future."

HR Strategist Lead

embrace change embrace failure iteration

Figure 4 Ambiguity tolerance is one of the key dimensions of design attitude; it was a trait celebrated across the organization and shown to be intrinsic to UNICEF's ability to confront change and deliver on innovation.

EMPATHY

"So we're looking at the spaces where we don't have all the answers yet and the industry doesn't have all of the answers, but we see tremendous potential."

Innovation Co-Lead, Erica Kochi

concern for people works with top-down processes with users

Figure 5 Empathy is a key dimension of design attitude and a foundational pillar in human-centered design methods. It was viewed as an important asset for the teams of the innovation Unit at UNICEF and one of the competencies that the Unite looks for in its team members.

CONNECTING MULTIPLE PERSPECTIVES

"I think design is bringing new thinking around some of the bottlenecks that we're facing as an organization"

HR Strategy Lead, UNICEF



Figure 6 This was a dimension of design attitude that emerged as a critical asset designers bring to the innovation context of UNICEF.

INHIBITORS

"I think there is more that we could be doing to guide our colleagues through that approach [design] because unless you've done it, it has a tendency to sound a little more ambiguous."

Innovation Lead Academic Partnerships

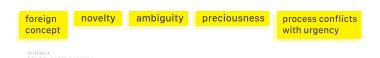


Figure 7 The data of the study also makes clear that what there is further articulation and understanding needed of the ultimate value designers may bring to international development.

Innovation and Design: Micro and Macro Levels of Interaction and Impact Across the Organization

The findings of the ethnography are summarized in a process model (adapted from Thornton et al., 2012 and Anderson et al., 2006) that captures the dynamic nature of innovation at UNICEF. The model seeks to clarify how implicit mechanisms in organizations (in this case, important drivers in the institutional logics of UNICEF as an organization accountable to a global development landscape in flux) can explain the effects of organizational socialization practices and individual actions (in this case, innovation activities and design attitude approaches carried out by the Innovation Unit) and vice-versa. As a conceptual rendering, it situates design attitude (noted as DA) within various levels of UNICEF and highlights some of the complexities inherent to collaboration in large organizational bureaucratic systems. Here the author reproduces that model, which is shown in figure 8 below. It should be read from bottom left to right and upward, counter clockwise.

Design Attitude (DA) in the Organizational Context of UNICEF

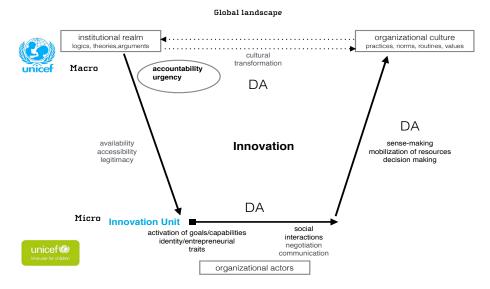


Figure 8 Model of Innovation Dynamics and Design Attitude (DA) at UNICEF

Part Three: Discussion

The author's ethnographic case study of UNICEF attempted to shed light on how design attitude and design principles intersect with the evolving innovation practices of UNICEF, confirming design's collective agency as well as its limitations in social processes of reconstruction and innovation. The research aspired to provide a new theoretical basis for exploring how design attitude manifestations interact with processes of innovation at the organizational level. It also sought to offer a more nuanced understanding about the extent to which design, as a knowledge-domain and deeply humanistic approach to problem solving, may be conducive to enabling an environment that is oriented to change and collaboration. Thus the primary intention was to offer new empirical evidence of the value of design and designers to innovation development initiatives, and generate new grounds for the adoption of human-centered design more strategically at the organizational level. Since the publishing of the study, within the context of the author's doctoral dissertation, the research has resonated positively, not only with the UNICEF Innovation Unit and other UNICEF staff, but also with

outside researchers and stakeholders in the field of innovation for development who are equally dedicated to bridging theory and practice. From the author's perspective, one of the rewarding reactions to the research is how much it has catalysed conversation of implications at the practitioner level. For example, the design attitude dimensions that surfaced as "wins" for organizing and pushing through innovation activities have inspired the Co-Lead of the Innovation Unit, Christopher Fabian, and his staff to confidently search for these competencies in future hires for specific contractual agreements (Fabian, in unpublished correspondence with the author). In this scenario, design attitude was recognized as an organizational capability that is more than just adopting a toolkit of individual problem solving methods, but instead a strategic capability that deserves to be sought and nurtured in order for innovation to succeed. On the opposite side of the spectrum, in terms of design and design attitude's limitations, the study offered a macro-level view of the external constraints and organizational forces that can obstruct innovation and perpetuate bureaucratic and "business as usual" processes or status quo that keep the perception of design's value at the periphery (Amatullo, 2015). Given the very high stakes and scale of complexity that organizations such as UNICEF must operate under, many of the approaches that make design a potent asset for generating new ideas are often questioned for their legitimacy. In a context that needs to ensure that novel ideas fit within the logic of organizational constraints, innovation efforts can encounter an uphill battle (Mulgan in Ramalingam and Bound, 2016, p. 153). Factors such riskaversion, or lack of time for multiple rounds of prototyping ideas, or reframing issues with generative design approaches are often not possible due to institutional pressures or accountability concerns. Another postresearch insight for the author is a realization of the elucidatory and timely nature of the original field study. The generalizable nature of many of the findings in the study were validated and confirmed by conclusions from other contemporary research of similar programmes and initiatives across the ecosystem of innovation for international development. The recent NESTA report edited by Ramalingam and Bound, (2016), to which the author also contributed, is a testament to this validation of the data and analyses of the ethnography. The NESTA publication includes a compilation of case studies and contributions across varied organizations and initiatives that represent "the state of the art" of innovation in international development. From the perspectives shared, one can surmise that there is an unquestionable new understanding about design's value in the field, along

with the sound awareness that innovation is not about finding silver bullets, but rather about trying new approaches for collaboration and learning while balancing a process that may feel like walking a tightrope. In fact, the ethnography of UNICEF contributed to one of the crosscutting messages in the "organizing for innovation" chapter in the NESTA report: "the need to clarify the goal of supporting innovation and to beware of the trap of 'innovation-speak'" (Ramalingam and Bound, 2016, p.46).

Limitations

The goal of the ethnographic study at UNICEF was to develop an authentic and reflexive narrative that openly recognizes that all data collection involves theoretical presuppositions (Hanson, 1958) and is shaped to a certain degree by the role of the researcher's active participation in the research process itself (Hammersley and Atkinson, 1995). In this sense, while many aspects of findings may be generalizable and contribute to advancing our understanding of the drivers that enable or inhibit the collective agency of design attitude at a macro-level of organizational analysis, the theoretical contributions presented are inherently limited in their inter-reliability and replicability by the idiosyncratic nature and methods of the study itself (Pratt, 2009). From a content perspective, a second limitation of the study is related to the fact that the researcher did not conduct an extensive literature review on institutional entrepreneurship. This precluded an investigation about additional factors that may be significant in accounting for innovation practices. Finally, a possible direction for future research might interrogate the impact of embedding a design attitude approach in less entrepreneurial organizational environments where a design-fluent culture is not present (unlike the Innovation Unit of UNICEF) to consider what, if any, differences arise.

Conclusion

In his opening remarks of UNICEF's February 2015 Executive Board meeting, Executive Director Anthony Lake commented: "yesterday's top-down world has turned on its side, replaced by today's horizontal world," (Lake, 2015,p.6) thus situating the innovation agenda as part and parcel of the organization needing to maintain essential relevance in a changing world. He further stated: "We can look at this as a challenge or as an opportunity—an opportunity not to evade this new world and its complexity, but rather to embrace it and to use the changes around us to forge new partnerships, new collaborative efforts, new ideas, new solutions

and new movements." (Lake, 2015,p.7). The author's original study of UNICEF 's Innovation Unit attempts to present an in-depth view of organizational life within an international development sector that is clearly in a state of profound flux. The picture that emerges from the study's findings is of an environment where organizational actors are imagining alternative scenarios to produce systemic and deliberate innovation, while grappling with discomforting complexity, conflict and uncertainty. The present synthesis and extension of that study points to the value the sector may find in understanding and integrating design attitude as an effective mode for taking action in order to help fulfil its innovation agenda with renewed force.

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