

Title: Reflections on the Responsibilities of Design Thinking in the New Economy¹

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1. Introduction: Responsible Design Thinking

Design thinking in management today is popularly comprised of a slew of once independent, disciplinary forms of thinking chief among them, ethnographic thinking, empathetic thinking and innovative thinking. Even green thinking is part of this design thinking now. While all these forms of different design thinking can be deemed already as responsibility in action—that is, empathetic thinking demands designers to position themselves in the situation of the users as green thinking behoves a greater ecological consciousness while making design decisions—we also have a choice in asking if a distinct category of responsible design thinking exists. This latter choice is instrumental in the following two ways: not only can this category of design thinking assist the ethical analysis on different forms of design thinking, but it can also serve as a supportive tool for crafting future conceptions of design thinking as the field of design management grows.

In this paper, we invite readers to imagine with us what a nascent category of responsible design thinking would look like. Briefly, we suggest that we can begin thinking about a working category of responsible design thinking along the following four vectors, namely:

- (i) *Responsible for* — Responsibility that implies both cause and accountability of design thinking and actions.
- (ii) *Responsible to* — Responsibility to others culminating in care, stewardship and even duty in design thinking and actions. Peculiarly this category also implies a responsibility to *oneself* as a designer.
- (iii) *Responsibility within* — Responsibility within a stream of practice, practitioners and ideas that interdependently structure the field of design.
- (iv) *As a Responsible Designer* — Responsibility indicative of an excellent character approaching virtuousness in practical situation of design management.

These four vectors are not completely separable in practice; rather, they are made only analytically distinct to clarify our process of inquiry. Neither are these vectors ‘novel’: for each rests—however uneasily—on at least one major branch of ethical theory ranging from consequentialism, Kantian ethics, Feminist ethics, discursive ethics to virtue ethics. However here, our aim is not an explication of how each vector relates to their respective branch of ethical theory. Instead, we argue that to engage in design thinking is also to some extent, be responsible in one or more of these vectors. If our argument is convincing, then we are also sufficiently confident that these vectors can inform further collective effort in formulating a theory of responsibility in design, a task deemed particularly acute when we take the extent—as well as the gravity—of design thinking in post-modern organizations and beyond today.

Before this analysis, we present a brief historical narrative on how design thinking has evolved from the field of design theories and methods, and from there, situate the problem for a theory of responsibility in design.

2. A Historical Narrative on Design Thinking from the Field of Design Theories and Methods

Historically, the effort to delineate design thinking has been tied to the effort of rendering the thinking process of designers explicit (Gregory 1966). Amidst the great technological changes in the decade between the late 1950s and 1960s, the domain of design was forced to challenge its own intellectual foundations predicated upon what was seemingly understood then as “intellectually soft, intuitive, informal, and cookbooky” (Simon 1996: 112). No longer could design follow its intuitive precepts, argued Christopher Alexander, for the design problems of that period have transcended in complexity beyond the intuition of any single designer (Alexander 1964). Furthermore, design as a curriculum within different professional schools of the university was struggling to hold its place against

other more explicit and teachable scientific techniques of problem-solving—for example, Operations Research—that like design, also promised a set of ‘optimal’ results but unlike design, could be duly justified through the steps taken during problem-solving. Against these technically rational and perhaps ‘superior’ competitors, design then seemed like an anachronistic Delphic mystery.

2.1 Procedural Design Thinking

To make design both respectably teachable and explicitly tractable as a mode of problem-solving in this context, proponents sympathetic towards the effort of systematizing design began an attempt to describe the design process through what is now known as “procedural design thinking” (Rowe 1998). In procedural design thinking, designers were interested to ask this foundational question: ‘how does one design?’, which is predicated upon an even more fundamental question, ‘where do ideas come from?’. Different design thinkers furnished different answers. For example, Bruce Archer provided the staged-process model of design (Archer 1984); Herbert Simon explicated his means-ends bounded search process of design (Simon 1996). Nevertheless in the range of possible answers to this question also rests the assumption that describing the process of design also leads a design thinker to a better understanding of where design ideas come from. In other words, procedural design thinking is also the “guarantor” (Churchman 1979) of design ideas—procedural design thinking guarantees that when such a process has been undertaken, the designer ought to arrive at some ideas recognized as design ideas or solutions.

2.2 Collaborative Design Thinking

But this ‘guarantor’ as procedural design thinking does not guarantee the quality of the design ideas—it was merely sought to describe the design process. To know the difference between what the designer intended and how the design ideas or products are perceived, one is required to also consult

others involved in the design process. Recognizing this limitation in view of the rapid development of complex technologies requiring collaboration between different specialties in design on one hand, and on the other, acknowledging the rights of plural but equal stakeholders to influence design decisions after the socio-cultural upheavals of the late 1960s, design thinkers affected by the energies of that milieu realized that a new design thinking was needed: one that not only addressed the limit of procedural design thinking in light of the renewed political status of the stakeholder as a participant of design, but a design thinking that could integrate different sources of knowledge presumed to be present in this new mode of participatory design. We suggest this emergence as the turn to ‘collaborative design thinking’.

Through this premise of collaborative design thinking, problem-setting became as important as the problem-solving paradigm of procedural design thinking (Schön 1984). Since there were more designers from different specialties each bringing their unique perspectives to the same design problem on one hand, and on the other, recognizing that each prospective user of the design is different but equal, collaborative design thinking sought to address the shortcoming of the “symmetry of ignorance”—the idea that we differ in the little bits we know but in our ignorance we are all equal—through design as argumentation (Rittel 1972, Rittel 1988). In design as argumentation, collaborative design thinking is exercised whenever the designers and the participants of the design process discursively make their design preferences known and explicit for the intellectual interrogation of other plural stakeholders with the aim of reaching a design goal that is rendered through mutual consensus. Even when no design consensus can be reached, conflicts ensuing from this process highlight the problematic areas that require further collaborative design thinking together.

What is however edifying through collaborative design thinking—beyond the well-deserved acknowledgement that it has enriched design through the participation of different stakeholders bringing different epistemic perspectives to the design problem—is that it moved design thinking from the Cartesian world of abstract technicalities to interface with the larger social world of practical and political

considerations. That is, design can now be acknowledged as a “social process” (Bucciarelli 1988). No longer is design strictly defined by the abstract symbolism of the design cognitivist in procedural design thinking; instead, design is now widely accepted as an interactive, political, and reciprocal process with the social tools, artifacts, agents, and discourses made available to the designer in the wider arenas of his or her practice.

3. Preamble for Responsible Design Thinking

And thus collaborative design thinking as a move from the inner mind of the designer thinking procedurally to the larger and much more complex socio-political world can be deemed as the source of design thinking that started it all—the idea that design thinking is no longer the thought process of specialized focus group but rather, formulated through the rich insights from ethnography (Mariampolski 1999); or embedding systemic ecological considerations through design thinking to influence the process of design (McDonough & Braungart 2002). In this move, design thinking is no longer solely concerned with the object or the process of design. Instead, design thinking has become intertwined with a larger political process on who benefits and who bears the risks of design thinking and actions.

But just as the world of design thinking became larger and more complex as a result from the shift of procedural design thinking to collaborative design thinking, the extent and subsequent consequences of design thinking on human affairs have become much more far-reaching as well. But this extent of design thinking bears no note to the severity of its consequences unless we also concede the power of design on one hand, and on the other, consider the possible ramifications of such a power situated now in the post-modern organization. Here, we review the conditions of the post-modern organization first, followed by a review of the current power and fearless inclination to design.

4. The Conditions of the Post-Modern Organization

It is often remarked that definitive definitions of the post-modern organization do not exist. If so, then there are only more appropriate and less appropriate contingent ways to go about defining the post-modern organization. For this paper, we employ a helpful heuristic of inverting the conceptual characteristics of a modern organization (to a limit) as our working characteristics of a post-modern organization. Even so, we keep our minds open to other heuristics in existence. For example, the heuristics of “reversal” (Clegg 1990)—where the post-modern organizations reverse their inherited processes of a modern organization—and that of “combination” (Bergquist 1993)—where the post-modern organization is a combination of pre-modern and modern organizations.

As a start, the modern organization is often described as hierarchically vertical (or pyramidal), powered by a division of labor augmented by a division of specialization, employs the supervision of control and surveillance to ensure labor cooperation for the purpose of the organization, where workers are selected for their prospected fit to the organization, where career paths are determined through the successful mastery of one’s own sector of routine, where authority is mostly derived from the empowerment of bureaucracy in place, and where precise boundaries could be established between the organization and its environment. In such modern organizations, faithfulness to rules and routines, mastery of one’s specialization, obedience to higher managerial authority, rationalization of productive processes and buffering the organization against changes of the environment are the lubricating oils of this vast machinery of command and control. Certainly to say in such modern organizations, design thinking belongs to the managerial ‘brain’ of the organization (Mintzberg, Ahlstrand & Lampel 1998), and therefore, is structured away from the shop floor or line operations of these organizations.

On the other hand, the post-modern organization through our inverse heuristic is nearly (or allegedly) hierarchically horizontal, where division of labor and specialization has turned into a

contingent *mélange* collage of meeting skills and passions to capricious market needs; where workers are hired on the basis of their potential for some unknown future challenges (Sennett 2006); where the middle management of supervision and surveillance is sorely missing, replaced by a system peer-watching to enforce mutual cooperation; where ‘careers’ as structured paths are truly misnomers; where there is no more authority with responsibility but power without responsibility (Sennett 1998), and where the organization is truly “boundaryless” in a network of organizations (Hatch & Cunliffe 2006). In such post-modern organizations, improvisation under relentless changing decision premises, fluidly working ever faster across different specialties as a jack-of-all-trades bricoleur, participation in different projects across different managerial boundaries, struggling for ever more creative offerings against the rationalization of the organization and the market; and opening the organization up to—instead of buffering against—the new opportunities and the free-wheeling “creative class” (Florida 2002) all become the new engine of ‘growth’ for the post-modern organization.

Where is design thinking found in the post-modern organization? Design management scholar Brigitte Borja de Mozota offers us several possible places where it can be found (Borja de Mozota 2003). In some organizations design thinking is found in the lateral, externalized units of the organization, for example, in the case of the design of the RAZR phone in Motorola (Lashinsky 2006). In some other organizations design thinking is performed in-house, such as the case of Bang and Olufsen (Greene 2007). For many bigger corporations, design thinking is subcontracted to design ideation firms like IDEO or ZIBA Design. But wherever design thinking is in the post-modern organization, it takes place in more places than just the ‘brain’ of the modern organization. As a matter of fact, design thinking in the post-modern organization often occurs through the entire lateral section of the boundaryless organization—from the management to the line operators to the subcontractors—where every interdependent unit is encouraged to think ‘out of the box’ relying on participatory sources of innovation flexibly addressing palpably felt local needs. If so, then this also translates into a growing proliferation of design thinking in the post-modern organization when compared to the modern organization.

5. The Powers and Fearless Inclination to Design Today

As aforementioned, the proliferation of design thinking merely cautions us to the expanse of arenas in human affairs where design thinking is exercised today. Unless we also take the power of design in changing the world into consideration—as well as the creation of some likely undesired and unanticipated consequences through the design process—we will not be able to suggest how and where responsibility enters into this picture.

In the past, the notion of design as the science of the artificial (Simon 1996)—as demarcated from the natural world—was possibly sufficient. But as the natural world has increasingly become more artificial, it is nearly impossible to tell where the line of demarcation now lies, especially when humans now have the newfound capacities to design themselves where once their autonomous natures were left to the chances of the natural world (Sandel 2007).

Here, we suggest that design is rapidly moving in two diverging yet equally incomprehensible directions. The first direction is ontological. In this direction, design can now transform human nature directly. In this manner, our relationship to design has profoundly changed. Take the instance of Dr. Craig Venter's synthetic genome as an up-and-coming prototypical example of what is to come². This design capacity—perhaps residing more with the skill-sets of physicists before and now extending to the genomists and nanoscientists than with managers or industrial designers, but nevertheless in a networked post-modern organization we cannot say for sure—has profoundly shifted the artificial *into* the natural through design. In the opposite direction, design can now create complex systems at the level of the 'massive-scale'. Here, design now go 'extra-large' through systemic mega-projects that can hardly be comprehended by any one designer involved even though simplified diagrams exist to describe them.

² <http://www.jcvi.org/cms/research/projects/synthetic-bacterial-genome/press-release/>

Furthermore, such ‘massive-scale’ systems often tightly couple otherwise loosely coupled ecological and artificial systems potentially making what seemed like a small error the catalyst for an unpredictable scenario (Perrow 1984). A prototypical example is China’s Three Gorges Dam Project³.

While one can argue that neither of these directions have anything to do with the design thinking of managers and designers, we would be hard pressed to deny that the nature of design is fleeing—and has been fleeing—from the visceral and vicarious understanding of the managers and designers alike (Protzen & Verma 1997). Using Christopher Alexander’s story of the peasant shawl-maker, in the past designers worked viscerally with the object of their manipulation. Then when problems became more complex, they required a systematic, “formal picture” (i.e. plan) as a mediating aid to design (Alexander 1964). But now even with a “formal picture”, we cannot grasp the reality of design—and its possible concatenations—as it flees from the designers in the aforementioned two directions.

5.1 The Curse of Makeability and Feasibility, and the Belief of Design (Design-ism)⁴

Here, we further suggest a glaring paradox in design thinking where this seemingly fearless inclination to design even more is taking place at the same time when we are least able to understand design responsibly. This paradox can only be compounded by what Rittel once called the “curse of makeability” (Protzen et al.) and the “curse of feasibility”⁵ all grounded in an unrealistic belief of design (i.e. design-ism).

³ <http://www.ctgpc.com/>; this trend is articulated in Flyvbjerg (2003), *Megaprojects and risk: an anatomy of ambition*.

⁴ I credit the inspiration and ideas of this section to Professor Jean-Pierre Protzen’s *On Horst W.J. Rittel’s Pathologies of Planning* (Protzen 2008).

⁵ Horst Rittel’s personal notes.

For Rittel, the ‘curse of makeability’ is tantamount to the fearless willingness to exercise the power of design into every sector of our existence. From the foundational tempering of the basic blocks of life to the perpetual and accelerated offerings of design products and services consigned too swiftly to the bin of planned obsolescence, design has turned into the performance of the doctrine of ‘just do it’. This ‘curse of makeability’ is also complicit with the temptation of technology. In the words of philosopher of post-modernity Zygmunt Bauman, “It does not matter *quoi on peut faire* as long as *on le peut faire*” (Bauman 1993: 188)—meaning ‘it does not matter what one can do as long as one can do’⁶: one does not need an end to justify the means.⁷ To operationalize the ‘curse of makeability’ in design, it is the directive of ‘if we can do it, we will do it’.

On the other hand, the curse of feasibility⁸ amounts to shortsightedness in one’s chosen frame for design decision-making (Churchman 1961). According to Churchman, this shortsightedness finds the feasibility of the foreseeable, concrete and realizable goals much more attractive than taking into account the unforeseeable and indescribable goals beyond one’s own space and time to its ultimate detriment—especially since design now can influence much more than it claims to see and especially so in design now as a political process where no one can be completely certain of what to see (Arendt 2005)⁹. To

⁶ I credit Professor Jean-Pierre Protzen for this translation.

⁷ Contextualizing Bauman in design studies, he is saying that this is a disposition that one does not need to justify a design action rationally—a particularly worrisome disposition considering that while the design action does not need to be justified rationally (e.g. we design because it is fun to do so), the undesired consequences of this design action has to be rectified rationally.

⁸ We choose to interpret the curse of feasibility through the theoretical lens of C.W. Churchman who was also a prominent member of the design thinking community of Rittel’s milieu for two reasons: one Rittel did not write much on this notion of ‘feasibility’; and two, Churchman did write something on the problem of feasibility though he did not use the phrase, ‘curse of feasibility’.

⁹ Precisely in Arendt’s words, politics is an open-ended process that cannot be planned ahead of time but is founded upon the situational interactions of the moment.

operationalize the ‘curse of feasibility’ in design, it is the directive of ‘if we will see it, we will do it’, which is to say, ‘if we cannot see it, we will not do it’.¹⁰

It is not hard to conceptually validate the ironic manifestation of these two ‘curses’ especially in the post-modern organization exercising the power of design. On one hand, if one organization in the boundaryless, networked environment does not design when it ‘can’, another will design in its place without even belaboring on the relentless pace of compelled innovation a post-modern organization is required to undertake in order to survive. On the other hand even though this same post-modern organization ‘sees’ farther than the bounded modern organization, the span of its organizational actions is paradoxically much shorter for two reasons: one, because the post-modern organization strategically plans less for productivity than it swiftly and flexibly reorganizes itself for productivity around new opportunities; and two, the post-modern organization tends to maximize as well as to conserve slack for such flexible reorganization by committing less to the long view than leveraging on a salvo of shorter bursts of organizational actions for faster returns. And so the twin curses manifest themselves to the detriment of the incautious post-modern organization exercising the power of design: it has to do what it can do without further consideration, and it can only do what it will concretely see in the short term¹¹; and in this process, producing the counter-productive consequences and disabling effects of these ‘curses’—which are precisely what they are as harbingers of future harm and misery.

Beyond the organizational predilections for the manifestation of these two curses, there exists also a fearsome belief that design—we call it ‘design-ism’ here paralleling the 19th century ‘scientism’—

¹⁰ Churchman’s dilemma of the predilection for ‘feasibility’ presents us with a puzzling scenario. On one hand to jettison the concrete for the unrealistically Utopian over-commits designers. On the other hand, to attain only the concrete designers over-omit what they may be responsible for and overwhelmingly, leave out arenas where they can become a real force for positive change.

¹¹ One can see this latter proposition as represented by the limited sight of the shareholder who is only interested in concrete gains.

will always get the better of the problem it has created. Philosopher Han Jonas suggests this belief as the blind confidence of further betterment through even more remedies of design on the problems and dissatisfactions caused by prior designs (Jonas 1984: 239)¹². Designers blighted by this blind confidence are not only acting as problem-solvers but also as problem-creators (Churchman 1961: 376). Sociologist Ulrich Beck interprets these insights as a fearful cycle of problem-solution and problem-production in the ecology of specialized organizations; where one organization's design solution becomes another organization's problem to be solved through design in a never-ending cycle of growing fatalistic risks (Beck 1992: 178). This optimistic belief of design-ism both requires and justifies its own unsubstantiated faith; and in doing so, produce much good but also real and potential harm.

The sum of these cautionary remarks on design can only place the design thinker in an uneasy dilemma within the post-modern organization. On one hand it is unreasonable to deny the positive gains of active design thinking and actions. But on the other hand, the confidence of these positive gains through design can also swiftly erode into a never-ending cycle of the proliferation of incomprehensible risks. It is through this dilemmatic position that we turn to thinking about the responsibility of design thinking and actions.

6. Responsible Design Thinking: The Four Vectors of Responsibility

The premise for responsible design thinking is a simple one. If we accept the idea that design when exercised relentlessly and incautiously can produce harm and misery, but if we also accept the idea that design is a real force of positive change and dividends—that we should not stop designing—for human affairs, then the only conclusion we can draw for practical action is how to exercise design responsibly, which is precisely what responsible design thinking along these four vectors is all about.

¹² This insight was based on the Jonas's endnotes on pp. 239. I took the liberty of substituting his original word of 'technology' for design here. But the moral connotations are the same.

6.1 ‘Responsible For’

Along this vector, a designer considers himself or herself *responsible for his or her actions*. This is also the ontological responsibility of a designer being accountable for his power to design and subsequently, to bear the responsibilities for the consequences following from the exercising this power (Nelson & Stolterman 2003). In the practical sphere, to be ‘responsible for’ something is also to imply both a “cause” for a design outcome (Bovens 1998), as well as drawing the boundaries of one’s responsibility—‘how much am I responsible for causing this design outcome?’

Clearly, while this question has to be asked in any responsible post-modern organization, it is much harder to answer in the positive. One possible reason for this difficulty lies in the transient and shifting task boundaries of the designers within the post-modern organization—one can plausibly be responsible for both projects X and Y to some degree in one moment and solely for Z in the next even without considering the overlapping responsibilities of many others collaborating on the same project; or what is commonly known as the problem of clear accountability in a project of “many hands” (Bovens 1998). But this difficulty only served to highlight yet another aspect of this vector, which is to say that a designer is morally responsible for his actions as well as for his *ignorance* (Bauman 1993: 220). Being responsible for one’s ignorance is to be sufficiently responsible to say that ‘I do not know’, and in doing so, curtails from the opposite direction what one is capable of committing for one’s design action. If one can responsibly concedes ignorance, then one is responsible for his or her actions until that brink before ignorance.

Clearly also, ‘responsible for’ cannot always be known either through the nature or the gravity of the consequences of a design action even when they can be known. There are after all, design actions where the consequences are too heavy to bear—for example in the tweaking of human natures neither explicitly for curing diseases nor restorative surgery, but for the deliberate design of the ‘super-human’

(Sandel 2007). In fact, no designer should ever bear the consequences of such a design action; and therefore, should refrain from the design action when the designer cannot be responsible for—even though he or she is not ignorant of—this design outcome.

6.2 ‘Responsible to’

Next, we consider the vector of a designer *responsible to something or someone*. Traditionally in organizational studies, this was Barnard’s notion of responsibility to act according to some moral codes in the presence of strong natural impulses to do otherwise (Barnard 1968). The famous story Barnard used for illustrating his concept was the filial operator who stayed at her job at the switchboard while watching the house burned down with her bedridden mother in it (Barnard 1968: 269).

But being ‘responsible to’ does not only mean a responsibility to one’s own moral codes or the codes and rules of the organization; it can also imply being responsible to others by caring for them (Tronto 1993). This enlarged sense of caring takes the concerns of living agents and species of flora and fauna directly or tangentially affected by the design action as paramount. Indeed, this form of care is not different from being responsible to one’s self, parents, spouses, children, neighbors, pets and living plants when they become part of a designer’s charge through design. Ultimately, “caring involves an intelligent, wholehearted concern that seeks to prevent harm and to provide help” (Rockefeller 2007: 193). In design studies, we see this in the concept of Universal Design as a design taking the considerations of different users into account, which is a paragon in design thinking of being responsible to others.

Curiously, whether we take Barnard’s organizational perspective or the perspective of care and empathy, ‘responsible to’ also implies responsibility to oneself such that only by being responsible to oneself can one live with himself or herself (Arendt 2003). This nearly inexplicable characteristic of being responsible to oneself straddles between the nature of one’s conscience and that of one’s personal

conviction. Unless one has performed what one believes to be right, one is unable to live with himself or herself. This intriguing feeling of self-motivation is often the source of much design; and so we suggest that to design autonomously is already to be responsible to oneself. Thus, how this responsibility to oneself culminates but also evolves into responsibility to others is the challenge of this vector of responsible design thinking.

6.3 ‘Responsibility Within’

Here, we consider the designer as *responsible within a stream of practitioners, practice and ideas*. No designer is an island unto himself. The designer thrives amidst a great stream of other design ideas that serve as the basis of his or her emulation (Nelson 1965). To the extent that a designer finds himself or herself within this stream of practice, and insofar that this designer borrows and emulates, to be responsible within this practice behooves this same designer to ask, ‘Why did they (other designers) do that?’, which is followed by the question, ‘Do we want to perpetuate that?’ when the answer to the first question is at least a dubious one. We suggest here that asking ‘why’ consists not only of seeking the *raison d’etre* of these original design ideas, but also questioning the *moral premises* of these ideas. If this had been done, products that demand the perpetuation of harmful materials or technologies—for example CFCs or Tetra-ethyl Lead in gasoline—would have been stymied long ago.

However on this act of questioning any one designer can also rightfully ask, ‘Am I my ‘brother’s’ keeper?’¹³, and even more seriously, ‘how can we know ahead of time that a certain design idea is harmful?’ To the first question we suggest that to question the moral premises of design ideas does not necessarily lead to the infringement of rights¹⁴. As a matter of fact, in a community of design practice

¹³ The famous reply of Cain to God on the whereabouts of his murdered brother Abel.

¹⁴ But it can sometimes implicate others financially and legally. We refer to the famous case of the ill-designed aircraft brakes by Kermit Vandivier (Vandivier 1972). While the writer did not

where a great symmetry of ignorance exists both inter-subjectively between designers on a certain design artifact as well as objectively on the possible outcomes of this artifact, there is no other way than to adopt a discursive practice of mutual constructive criticism and conflict. And so to the answer the second question tentatively here, we suggest that only through such constructive criticism and conflict can there exist creative learning and mutual awareness of the design idea for the community of stakeholders and clients interacting with this design artifact.

However here, one must further qualify this vector of ‘responsible within’ as it is sounding remarkably like corporate “whistleblowing” (Bovens 1998). ‘Responsible within’ can take on qualities of whistleblowing such as the case of Vandivier on the faulty aircraft brakes (Vandivier 1972). But here, we situate ‘responsible within’ more as a ‘voice’ within a designer’s community and organization for interrogating design sensibility in a performance of ‘loyalty’ to one’s design community and organization (Hirschman 1970). In contrast to whistleblowing that mostly points towards ‘exit’ when fully publicized as an alleged accusation pending legal investigation, ‘responsibility within’ prompts the designer to morally search for different forms of active ‘voice’ before considering the threat of exiting from one’s design community or organization.

In today’s environment where a certain level of fluidity and movement of designers exists between design teams and even between organizations (Bauman 2007), the responsibility to not only constructively criticize problematic design premises, but also the responsibility of handing on proper and sound design premises to future generations of designers entering this stream of practice is tantamount to either great engendered inter-generational good, or perpetuating great heedless harm for the future generations. To be responsible within one’s arena of practice like this also possibly mitigates the harmful effects from the curse of feasibility.

question the moral premise of this design, he questioned how a corporation could pass a failed design as an adequate one.

6.4 ‘As a Responsible Designer’

Lastly, we arrive at perhaps the oldest question of all, ‘Can virtue be taught?’¹⁵—which is to say the least, the core mission of every design education and the ideal *modus operandi* of every designer working within a post-modern organization. Here, the aim of any design education—or professional workplace—lies in developing a designer endowed not only with technical competency of design, but also an excellent character to face the frequently complex and ethically messy situations of design practice. As a responsible designer within a post-modern organization, the designer is interested to ask, ‘what kind of thought processes, operationalized through actions, qualify myself as a responsible designer?’

On this we can take the inductive route of learning from the various paragons and ‘black-sheeps’ of practice, as Good Work scholar Howard Gardner has done (Gardner 2007). In the field of design management, good examples abound, for example, in socially responsible yet commercially successful entrepreneur like Tom Chappell of Tom of Maine, a dental and body care product company (Chappell 2007). But just as there are exemplary characters like Mr. Chappell, there are much more problematic characters like Dr. Edward Teller the designer of the super-bomb.¹⁶

But beyond the illustrations of what counts as exemplary and what counts as less so, the virtuous manifestations of a responsible character in practical situations cannot be specified beforehand nor are these manifestations easily equatable, which makes the task of any design educator or manager interested in cultivating excellent characters for the field of design challenging. Take our story of the virtuous Captain for instance. In one scenario during a war, the Captain rushed back to the front lines to rescue a wounded soldier. After the war, the Captain returned to civilian life as the principal of a reputable

¹⁵ The famous question Menon posed Socrates.

¹⁶ I thank Professor Jean-Pierre Protzen for this example.

elementary school and upon witnessing a young student that has yet to be picked up by her parents, he waited with the student until the child was eventually picked up.

We are hard-pressed to equate the responsible actions depicted in this story as the same kind. In the first half of the story, we say that the Captain was responsible to his code of honor as well as for his soldiers, and his responsible actions were intertwined with that of valor. In the second half of the story, we say that the Captain was primarily responsible to his students but also for the reputation of the school, and his actions then were likely moved more by compassion to accompany the anxious child than a rational intent to fulfill his responsibilities (because he could have instructed someone else to perform this task). What we know for certain is that the Captain possessed an excellent character; yet what we are also extremely uncertain of is how the Captain will specifically act in a new situation, though our intuition seems to tell us that he will not fail our expectations of him.

7. Conclusion: Is it “It’s beyond my control”¹⁷?

Certainly, design educators have a role to play in cultivating the responsible character of future designers. But for precisely the reason that schools are unable to furnish the kind of messy ethical situations that are only found in practice, post-modern organizations—and the leaders who lead them—must therefore play a decisive role as well.

Taking the sum of our analysis into account, we find ourselves arriving at a crossroad where choices remained stark. On one path the post-modern organization becomes the new workplace of surveillance; an oppressive police state of affairs where everyone polices everyone’s intents and actions.

¹⁷ The repeating statements of the character played by John Malkovich in the 1988 film ‘Dangerous Liaisons’ adapted from the 18th century novel ‘Les Liaisons Dangereuses’ by Pierre Choderlos de Laclos.

On the opposite path the post-modern organization continues to dismantle its own bureaucracy; where designers as workers now have to independently take charge of their own intent and actions at the expense of their sense of wellbeing and security (Sennett 1998). However, this state of affair intended to instill personal responsibility often reaps a contradictory harvest—where each is only for himself or herself being *responsible for* his or her own contribution in a design team within a competitive climate. Rather than exhibiting the more comprehensive mode of responsibility depicted by our account, designers aim to claim their individual slice of the prize only.

Ultimately, responsible design thinking is also a thinking that when carried out in action, would surely conflict with other forms of thinking—design or otherwise—that govern the corporate world. To assume this way would be unwise. Hence, an important question is how much authority in ‘voice’ a designer has within the post-modern organization, an issue the field of design management must not only convincingly argue on behalf of its researchers and practitioners to the leaders of such organizations, but must also show how integral this ‘voice’ is for the responsible persistence of the organization.

But ‘voice’ is perhaps only part of the challenge. Since ‘voice’ can only be activated when there is knowledge, transparency of design ideas then is the paramount concern. But here we face yet another conundrum. For even when we say that a typical post-modern organization is open and flexible, it also harbors a tightly buffered core whenever innovative design is being created, for example in the externalized team producing the Motorola RAZR phone (Lashinsky 2006) or the Apple iPhone where designers were completely sequestered without knowing what they were each individually putting together (Vogelstein 2008). In practices like these, responsibility may enter too late even when there is a will for it. This conundrum can only be exacerbated by the operational paradox that goes with it: for the greater the innovation—hence risks—the less transparent the design idea must be before launch. Frequently, this rule of operation is made on the sound reason of buffering this innovation away from dissent and distractions. But the responsible post-modern organization must also realize that it is precisely

this dissent and distraction that can alarm designers perhaps otherwise oblivious to the possible risks of their design artifact.

Even when we have no complete answers to some of these puzzles we have presented in this analytic paper, we conclude by suggesting that designers must believe that responsible design thinking can be mustered within their control. To disbelieve, hence relinquish this control, is to consign oneself to the impossibility of responsible design thinking even when the freedom of thought and action offered by the post-modern organization is nearly at its fullest now.

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