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Bridging Mindfulness and Design

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Abstract

Design literature regards mindfulness as a new competency that should be taught explicitly in design educational settings. This is associated to points of view that consider such skills relevant to ethics, uncertainty, and to evolving multidisciplinary, multi-stakeholder co-creative applications of design thinking. This document is part of a developing PhD programme that aims to describe and apply it explicitly to pertinent design academic situations. Extensive literature in diverse fields of research describes mindfulness in a number of ways that are said to sometimes cause misunderstanding. This conceptual paper aims to bridge mindfulness and design, and posits the concept of openness as a shared attribute within theories complementary to both. Openness, understood as receptivity to dynamic multiple perspectives, is then associated to the systems experience of interconnectedness as an alternate focus to the discussion of moral awareness in design. Furthermore, interpersonal attributes of mindfulness, relevant to the relational aspects of design, will be discussed. This analysis seeks to serve as a conceptual base to a doctoral study that explores reflective ways to make mindfulness explicit in design education.

Keywords *mindfulness, design education, openness, interconnectedness.*

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1. Introduction

According to design literature, the skills and roles required of the designer are diversifying in order to be able to efficiently act in wicked problem spaces for which there is limited precedence. Mindfulness is one such skill, and its considered to be a tacitly taught competency in design education that should be made explicit (Howard & Melles, 2011; Owen, 2007; Norman, 2010; Young, 2012).

In the sections that follow, the relevance to design of the concepts of mindfulness, mindlessness, openness and interconnectedness will be proposed. Openness is positioned as a shared attribute of mindfulness and design, and is understood as receptivity to dynamic multiple perspectives. Moreover, the visibility of interconnectedness in systems is presented as an alternate point of view to the discussion of moral awareness in line with what Akama (2012) regards as the potential abstraction of values in discourses that attempt to embed ethics with design.

The overall perspective for this blending of mindfulness and design is informed by several inferences. If the qualities that make up a mindful-attitude are also characteristics of creativity (Langer, 2014), then it could be said that designers, by the nature of their training and practice, would tend to develop mindful-awareness disposition. Whilst such mental capacities are associated with moral awareness and are said to foster interpersonal benefits (Siegel, 2009; 2012), design activity does not appear to have consistent ethical behaviour (Inácio & Gerardo, 2006); and the clash of egos is considered a core dysfunction of co-creation (Vyas & Young, 2011). In this sense, Young (2012) highlights the gap between action and intention, and the need to link purpose and practice for co-designers. He further suggests immersion in "evolving heuristics" to address this in design learning activities.

These points of view will be discussed by developing a multidisciplinary argument around openness and interconnectedness that seeks to bridge descriptions relevant to mindfulness and to design.

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2. Mindfulness and mindlessness synthesized

Whilst evidence of ambiguity and confusion is found in research literature that aims to converge research-oriented descriptions of mindfulness (Hart, Ivtzan & Hart, 2013), this paper does not aim to resolve them. Instead, a synthesized view is offered to help construct an understanding of the term that is applicable to design interests. In contrast with mindfulness, mindlessness is described as automatic action that can be useful since it unfetters the mind to execute higher levels of cognitive functioning (Langer, 1992; 2014). The argument against mindlessness is that most mental information processing seems to be mindless, and studies reveal that running on "auto-pilot" for too long can be detrimental to those same cognitive functions (Kahneman, 2011; Langer, 1992, 1997, 2014; Langer & Piper, 1987).

The concept of mindfulness stems from Wisdom Traditions and its described as the underlying mechanism of meditation (Feuerstein, 2003). Thich Nhat Hạnh, a well-known Buddhist monk whose teachings are framed around mindfulness, refers to it as keeping "consciousness alive" to the present reality. Whilst "sitting" meditation is still a pillar of the traditions, mindfulness is described as a meditative mental state that can permeate all aspects of daily life. He explains:

> "The chances (for mindfulness) are scattered everywhere: in the bathtub, in the kitchen sink, on a cutting board … literally anywhere. The moments and places of silence and stillness are wondrous and helpful, but not indispensable". (Nhat Hanh, 1975, p.107)

Meditative frames of mind appear to pivot around the quality of attentive engagement with internal or external perceived stimuli. For example, novelty is discovered in previously unobserved aspects of a situation, as in a "non-toothache" (Nhat Hanh, 1991, p.34). Langer (2005, p.214) describes mindfulness as "actively drawing novel distinctions" or "openness to novelty" leading to more informed perceptions. In this light, a potential way that mindfulness could be integrated in context is through discovering as novel, previously unobserved aspects of (in this case) design processes.

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The next section analyses how degrees of mindfulness and mindlessness may already be tacitly present in designing.

3. Mindfulness and mindlessness in designing

Designing, as reflective conversation could be considered to inherently integrate both mindless and mindful mental states. Schön (1983) describes an automatic knowing-in-practice as tacit design knowledge that is revealed in the process of designing. This intuitive knowing emerges in the midst of action and designers use this capacity to cope with uncertain situations of practice (ibid). Young (2012) suggests that the way such capacity is developed in designers (via repetition of craft practices) can lead to a *metic* tendency (or *metis*) in designers that, due to the lack of transparency in intent and purpose, can potentially compromise ethical approaches and risk egocentric propensities in multidisciplinary design contexts. Similar to knowing-in-practice, *metic* intelligence refers to skills acquired through long practice of repetition of similar tasks, which are displayed unconsciously as abilities to respond spontaneously to changing circumstances (Raphals 1992). Understandings of mindlessness in literature support this notion as a tendency to automatically hold on to rigid single-perspectives, rules and categories through repetition and practice (Langer 2014).

Hart et al. (2013) shed light on how mindful and mindless mental states may already inhabit designing. They analysed the relations between: mindfulness as described by Langer (2014); the model by Kahneman (2011) of the two information-processing systems that govern mindfulness and mindlessness; and the theory of flow (Csikszentmihalyi, 1990). Kahneman's model describes two systems: (1) an automatic, unconscious and under-regulated *system1* (S1) at the core of which are emotions, that promotes mindlessness; and (2) a deliberate, conscious and self-regulated *system2* (S2) at the core of which is cognitive regulation, that engenders mindfulness. S1's emotions and intuitions create the foundation for choices made, and values and beliefs held. S2's self-regulation controls S1's impulses. Kahneman argues that S2 is deployed into action when information or questions that S1 cannot tackle are encountered, therefore introducing a mindful mode of consciousness to the mix. This event that

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changes the quality of attention is similar to the concept of suspension (of habitual patterns), one of the three gestures of becoming aware as described by Depraz, Varela & Vermersch (2003). S2's deployment, according to Hart et al. (2013), is what can create the state of flow where, whilst immersion in the activity is semi-automatic and unaware of some surrounding events, at the same time there is openness and alertness to emerging and spontaneously arising creative insight. This suggests that designing intrinsically displays this balance of both automatic and mindful states of mind.

Following this logic, if values and beliefs are already imprinted in designing and emerge unconsciously along with skills acquired overtime, arguably the degree of tendency towards moral awareness or to interpersonal collaboration is likely pre-determined at that point. This is important to design as it is broadly substantiated that values and beliefs impact design choices. Strickfaden, Rodgers & Langdon (2006) state that:

> "The development of an artefact is inherently bound up with meanings, relationships, and value systems relative to the individuals creating them, and to the context of their immediate and external environments". (ibid, p.1)

Young, Blair & Cooper (2001) claim that designers need to be mindful of unconscious world-views and tacit assumptions. Akama (2012) insists that social and cultural values tend to be invisible and yet pervasive within the design process. Lawson (2006) stated that values and beliefs conform a designer's set of guiding principles and that they: influence the mental context and direct the framing of design problems; are at the root of designer's work satisfaction; seem to be associated with a higher level of design expertise; and are often manifested unconsciously. Thus, the potential impact on a designer's awareness, of more deliberate mindful activity is in spaces within the design process where values and beliefs held can be made visible and explicit, arguably transforming the embedded tendencies arising as *metic* intelligence.

The next section discusses openness as a shared interpersonal value of mindfulness and design, and explores an alternate view to the discussion of moral awareness in

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design, away from the abstraction of values and focusing upon the experience of interconnectedness in systems.

4. Openness and interconnectedness

So far, it has been suggested that, in designing, degrees of mindful and mindless mental states emerge in tandem as distinct mental information-processing systems. Whilst mindful-awareness disposition appears to: be characteristic of creative individuals, be associated with moral awareness, and promote interpersonal abilities, Inácio & Gerardo (2006) contend that the impact that designer actions have in the world "most of the times is a negative one, not only in social-cultural aspects, but also in an environmental perspective" (ibid, p.1). Moreover, this impact continues in spite of designers having access to the information of how not to impact the world in a negative way (ibid). Young (2012) proposes a way to address this in design educational contexts:

> "Engagement in socially responsible service design projects with communities of practice is the prerequisite learning method, supported by immersion in evolving heuristics that foster enkratic[1] co-design practice". (ibid)

This paper seeks to formulate an approach and contribute to such evolving heuristics. Considering that *metic* tendencies surface as a knowing-in-practice associated with the flow of designing, and that they are driven by a foundation of automatic emerging values and beliefs that impact design choices, then, as discussed, at that point the degree of moral and relational tendencies are likely pre-determined. These embedded values must also be invisibly present at other times in the framing of the design problem where relevant information (including information on how not to impact the world in a negative way) is obtainable. Yet, the fact that the information is available does not mean that the information is considered. Martínez (2015) found that design students did not consider sustainability impact information unless pre-established moments of reflection were planned. This implication is important because it indicates that to enter into any discernment upon what the value choice may be for the designer, or how not to impact

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[1] "An akratic person goes against reason as a result of some pathos ("emotion," "feeling"). Like the akratic, an enkratic person experiences a feeling that is contrary to reason; but unlike the akratic, he acts in accordance with reason" (Kraut, 2001).

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the world in a negative way, there appears to be a need to create reflective spaces to engender receptivity to such information. From Martinez's findings it can be inferred that designers tend to act based upon unconscious values and beliefs held, influenced by factors such as the internal/external dilemmas of "wills" associated with the immediacy of expectations of the design problem brief (Inácio & Gerardo, 2006). Arguably, this leaves any socially innovative, sustainable or moral tendencies, invisible.

The judgment upon what is moral is a complex inquiry that can lead to abstraction of values and imposition of ideologies (Akama, 2012). In the view of Inácio & Gerardo (2006) ideally, the "enlightened" designer would make well-informed formations of intentions and decisions on the best course of action, and would act accordingly. But what is the best course of action? Ethics are not in our biology (Dilnot, 2010), and ethical decisions in the professional realm are influenced by diverse factors, one of which is changes and variations in cultural values and beliefs (Gardner, Csikszentmihalyi & Damon, 2001). Within the framework of mindfulness, this paper explores an alternate, more timeless view to moral awareness, the subjective experience of interconnectedness.

Siegel (2012) explains that moral imagination and behaviour arise from the subjective experience of interconnectedness. This refers to the experience of meaningful connections with other people, communities, places or concepts. It is an understanding that arises from systems thinking perspectives of an experienced sense of closeness as opposed to a rational view. Moreover, this also refers to the subjective experience and definition of the self. The self is "in scientific fact, both an embodied and a relational process" (ibid, p.390). Similarly, in the context of the traditional view of mindfulness, Nhat Hanh (1975) explains that contemplation on interdependence is one of the ways to arrive at liberation from narrow views. He urges a recall of a "simple and ancient truth":

> "[T]he subject of knowledge cannot exist independently from the object of knowledge … When the object of knowledge (the something) is not present, there can be no subject of knowledge. The practitioner meditates on mind and,

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by so doing, is able to see the interdependence of the subject of knowledge and the object of knowledge". (p.45)

Akama (2015) proposes a similar view of the self as a function of its relational qualities. She offers an interpretation of the Japanese concept of *Ma* as "between-ness", to transcend paradigms that separate "prefigured boundaries" such as "self" and "other". She also suggests that attuning to relational dynamics situates the designer in "inter-relatedness", builds awareness of the multiple dimensions where designing happens, and forges aware relational connections that bring forth openness (ibid). This suggests that systems perspectives must expand to include perceptions of the multiple ways in which a self can be defined. Goleman & Senge (2014) allude to this notion:

> "The more we understand the process of developing systems intelligence, the more we see the close connections between understanding self, understanding other, and understanding the larger systems to which we all belong". (loc.504)

Capra & Luisi (2014) make a similar point. According to them, the configuration of a system is a "pattern of relationships within an organized whole" (p.9). They refer to integrative design as "systems thinking in action" and explain that to understand ecological interdependence, relationships must be understood and nourished. This view makes reference to natural and social communities that this paper will refer to as *external systems views*. Yet, they extend the systemic understanding of life to "the inner world of reflective consciousness, which contains a multitude of interrelated characteristics" (p.304). They propose that discrete inner conceptions of the self are real and yet, are not separate entities or structures. This paper will refer to this perspective as *internal systems views*. Stowell & Welch (2012) describe a system's existence as a description of systemic qualities perceived by an observer. As understood in this paper, in external systems the distinct components are (for example) stakeholders, their perspectives and how they relate; in internal systems the distinct components are the different aspects of the self, their values and how they relate. Receptivity to dynamic internal multiple views, potentially highlights the recognition that, parallel to external system views of communities, an individual is a network of interconnected self-

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conceptions, or self-aspects (McConnell, 2011) some of which may have seemingly contradicting values (Siegel, 2012). Langer (2014) suggests that conflicting information that emerges through mindful-awareness "throws the discussion back to where it belongs: on individual values" (p.199). Prospectively, this can promote more informed perceptions (ibid), and a visibility of the workings of the system gathered from multiple points that clarify their dynamics (Goleman, 2013). In other words, this may promote recognition that one aspect of the observed system is not the totality of a systemic reality and that more aspects and their interconnectedness draw nearer to a more complete definition of it. This infers that, in internal systems views, a designer can experience interconnectedness directly through the recognition of multiple self-conceptions with discrete (and sometimes contradicting) values, within one self-entity.

Openness to such dynamic perspectives and to new information is an important feature of systems thinking, co-creation, social innovation, mindfulness, and of design. Openness is considered a shared attribute of the varied constructs of mindfulness in research literature (Hart et al., 2013). Langer (2014) asserts that openness to multiple perspectives is an essential ingredient in mindfulness. Siegel (2010; 2012) refers to openness as an embrace of uncertainty and as a way of being receptive in the experience of connection with others, with our inner world, and to the unfolding of possibilities. From the perspective of design, Akama & Prendiville (2013) describe that the addition of the two letters, "co" in co-designing indicate an openness to "embrace the influence, interventions, disruptions, tensions and uncertainties brought to bear by other things and people" (p.32). Akama (2015) says that designers can learn to pursue uncertain paths towards openness, welcome the chance to be open for contingency, and become together through interrelatedness.

According to Scharmer & Katrin (2013), the behaviour of systems can only be transmuted by transforming the individual and collective quality of attention that people apply to their actions within those systems. Moreover, in the context of co-design, literature describes the influencing role of the designer (or design team) as a facilitator instead of an individual creator, in a process where all stakeholders are participating directly in the creation of the design outcome (Maase & Dorst, 2006; Young, 2012;

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Hocking, 2011). If the designer is a facilitator leading a co-design process, then there is ample potential to promote mindful-awareness through the design component. Goleman (2013) claims that teams excel when their facilitators promote three essential attention abilities: (1) *inner-focus*, which fosters self-awareness, self-management and attunes our guiding values (2) *other-focus*, which fosters empathic-awareness, and (3) *outer-focus*, which fosters external systems awareness. Arguably, a designer can greatly impact participatory states of mind. Cooke (2001) refers to the role of the facilitator in participation as the "interventionist". He explains:

> "There is nothing in participatory processes themselves that brings about a particular state of consciousness; rather, that state is shaped by the interventionist". (ibid, p.120)

This seemingly strong influence presents an opportunity for design to set a cohesive tone through mindfulness as opposed to a potentially coercive one through egotism.

Based on the preceding review and analysis, openness is described in this paper as receptivity to dynamic multiple perspectives to support visibility of interconnectedness in external and internal systems. It is suggested here that co-creative external systems views (that consider natural and social communities), should be complemented with reflective spaces that promote internal systems views (in order to include the diverse facets of the self as a system of interconnected aspects). In such a reflective space designers can potentially know more to consider more, and learn to "respond adaptively to situations rather than automatically, and on impulse" (Hart et al., 2013, p.28).

Following the systems thinking perspective, mindful framing of internal views should encourage the discovery of previously unobserved self-aspects as novel and attend to the relations between such aspects. This process is akin to the concept of *consciousness integration*, as conceived by Siegel (2009; 2010; 2012). Holding in awareness a "tension of seemingly contradictory things", a kind of embracing of opposites, is part of what Siegel defines as integration. It is an undertaking that addresses the complexity of systems by differentiation (discovering unobserved aspects

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as novel), and linking (discovering interrelatedness). An essential feature of this activity is that, as a visual metaphor, contents of inner perception radiate out of a hub of awareness, or observing-self, as the base linking entity that aids the experience of recognizing the dual discrete/interrelated quality of subjects and objects of awareness. This process, as mindfulness, is also described as "intra-personal attunement" and it is associated with neural integration that enables flexibility and promotes a person's capacity for rewarding interpersonal relationships (Siegel, 2007).

5. Conclusive remarks

The analysis in this paper has aimed to bridge mindfulness and design by discussing openness and interconnectedness as shared attributes between both. The connections illustrated in this document are expected to serve as a concrete base to a developing study that aims to assess the potential impact of heuristic reflective spaces within design academic contexts that foster internal systems views as described. The process is based on the concept of consciousness integration. A distinction was made between internal (self-aspect perspectives) and external (stakeholder perspectives) systems views. This is important because whilst consideration of dynamic multiple perspectives, is a shared value of internal and external views, mindful qualities of attention emerge out of internal attuning and self-regulation of individuals to permeate relational contexts and foster interpersonal benefits (Siegel, 2012; Parker, Nelson, Epel & Siegel, 2015).

Success in such a process of improving awareness and suspending habitual patterns of perception requires disciplined methodologies and social mediation (Varela, 2000). In this sense if the design of heuristic tools to foster reflective spaces as described in this paper, impact a designer's awareness, then this can potentially support sustainable development of mindful-awareness aptitudes in design academic contexts.

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