DISCTINCT APPROACHES TO DESIGN EDUCATION: PREPARING FUTURE DESIGNERS FOR AN AMPLIFIED PRACTICE OF DESIGN

DOCTORAL CONSORTIUM

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ABSTRACT

As a century of 'Fluid Landscapes' in Alain Touraine's words, our time shows a scenario of growing complexity, rapid climate changes, wars, global financial crisis, and disruptive demographic changes. It could be said that society responds to this scenario by developing a growing social responsibility, environmental awareness and empathy, thus impacting design practices and education. Literature shows signs of an amplified design practice that demands to be evidenced. Responding to emergent practices, a distinct approach to postgraduate design education intends to help prepare the future workforce to embrace ambiguity in processes, and welcome complex and paradoxical realities in order to produce innovative and sustainable solutions. This study intends to build a rich in-depth investigation into emergent design practices and into design education for those practices. Of particular relevance for design educators, this study aims to identify distinct approaches to postgraduate Design Education, contributing towards preparing future designers for an amplified practice.

INTRODUCTION

This paper presents the unfinished journey of a PhD research aiming to discover how can distinct approaches to postgraduate design education help prepare future designers for an amplified practice.

As a century of 'Fluid Landscapes' (Touraine 2007) our time shows a scenario of growing complexity, rapid climate changes, wars, global financial crisis (Imbesi 2011, Wood 2010) and disruptive demographic changes (UNDESA 2004, Davies, Fidler and Gorbis 2011). It could be said that society responds to this scenario with signs of a growing social responsibility, environmental awareness and empathy (Fleming 2013), thus impacting design practices and education. The previous also results in a need for design education models to change (Gornick 2005) in order to become more flexible (Martin 2010; McAra-McWilliam 2007; McWilliam and Haukka 2008).

Literature shows a number of complementary visions on emergent design practices that can be interpreted as implicit signs of an amplified perspective that demands to be evidenced. Responding to these practices a distinct approach to postgraduate design education can help to prepare the future workforce to embrace ambiguity in processes and welcome complex and paradoxical realities in order to produce innovative solutions (McAra-McWilliam 2007).

A SCENARIO OF CHANGES

For the purpose of highlighting the unique context of the present days to which design practices and design education respond and in which they operate, it is important to present a brief portrait of changes in the historical path of Design.

Before moving further, the meaning attributed to the word practice in this study refers to the professional

activity of designers, supported by the definition from the Oxford English Dictionary: "to pursue or be engaged in (a particular occupation, profession, skill, or art)", "to work at or perform one's business or occupation" (Oxford English Dictionary Online 2015).

The scenario of complex changes to be described below starts purposely in the 60s, a time characterised by the emergence of social movements that showed a shift in the dominant worldview towards a pluralistic perspective (Fleming 2013) that laid the conditions to significant changes in Design.

As depicted in Figure 1, emerging changes in design practice include a growing diversity of design specialisations (Souleles 2013); the rise of immaterial outcomes such as the design of cultures (Imbesi 2012); interventions in wider territories (Julier 2000, Bridgstock 2013, Imbesi 2012, Julier 2000) with political, economic and social concerns (Hobday et al. 2012); a closer work with academia (Buchanan 1998); and, a research-led practice.
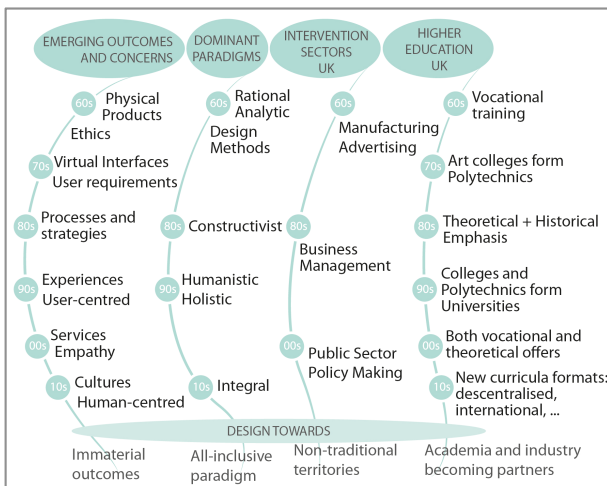

Figure 1 - Scenario of emerging changes in Design. Sources: Bridgstock 2013, Buchanan 1998, Burns et al. 2006, Cooper and Press 2003, Fleming 2013, Hobday et al. 2012, Imbesi 2012, Julier 2000, Souleles 2013, Tschimmel 2014.

This widening of Design's scope of action shows an emergent integral approach to Design (Fleming 2013) that includes transdisciplinary practices (Imbesi 2012). It could be said that today, the role of designers grow apart from a prescriptive role towards a human-centred role (Whal and Baxter 2008), emerging as a deeper level of the well-established user-centred approach (Burns et al. 2006).

Evidently, the presented complexity and a variety of design practices and design education approaches, accompanies the complex and fast world in which they operate, posing challenges for both designers and design educators in navigating such ambiguous waters. Today's new generation of wicked problems are characterised by their complexity, ambiguity, connection with other problems, and an unpredictable

non-linear behaviour that can produce unexpected consequences (Burns et al. 2006, Hobday et al. 2012, Wahl and Baxter 2008). These ask to be solved from a collective social approach (Hobday et al. 2012), which highlights a need to focus on subjective and deeper levels of design practice.

Following the above, it can be said that the fundamental wicked problem of the Twenty-First century, for designers, rests in making the human presence in the world sustainable (Wahl and Baxter 2008) where a design culture is needed to achieve an approach to sustainability that is more humane and meaningful (Michlewski 2015).

EMERGING DESIGN PRACTICES –
TOWARDS AN AMPLIFIED PRACTICE

Moving towards strategy rather than tactics (Murphy and Baldwin 2012, Hobday et al. 2012), knowledge generation (Imbesi 2011), integration behaviours (Hobday et al. 2012, Wood 2010), and a deep transformational dimension, design practices can be understood as in a changing continuum.

Highlighted in Figure 2 is the result of a literature review on contemporary views of the designers' roles that are mainly included in deeper levels of the practice and heavily centred in collaboration behaviours. To frame such review, the Rose Window Model from McAra-McWilliam (Roussos 2003) was used since it offers an integral perspective on design practices where four design sensibilities constitute facets of the creative mind and co-exist as a whole (McAra-McWilliam 2008).
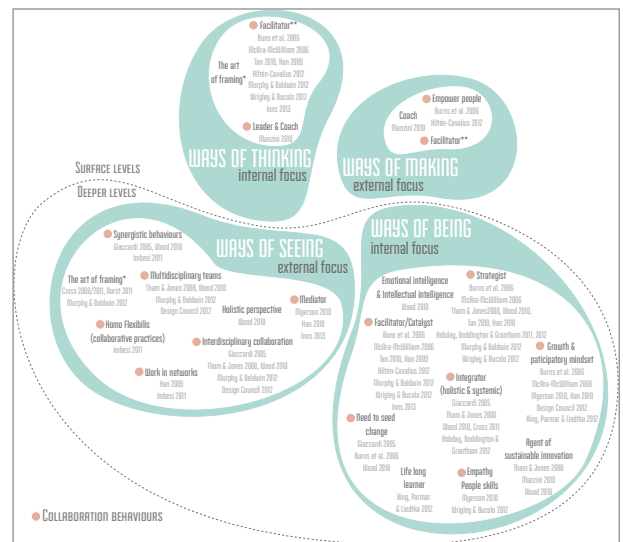

Figure 2 - Design practices interpreted using the Rose Window Model by McAra-McWilliam (Roussos 2003)

Currently, Transformation Design (Burns et al. 2006), Metadesign (Wood 2010), and Design Innovation (INDI 2014) are manifestations of the most recent design practices that show a different approach.

Metadesign is presented here as an "augmented mode of design practice" (Wood 2010: 165) that designs itself (Wood 2010) and goes beyond Ddesign. This approach acts as a fundamental level, more concerned with principles of practice, providing a more 'integral' frame.

On the other hand, Design Innovation seen by Lockwood et al. (2012) as a social-cultural phenomenon, one not necessarily linear; and Transformation Design seen as a practice that intends to transform communities and organisations through design (Burns et al. 2006). Both focus on the application of design and practical outcomes.

By putting these two perspectives together, it is our intention to take them further, following the integral principle of "transcend and include" (Wilber 1997).

Metadesign, Transformation Design and Design Innovation are at the heart of what this study offers, albeit notionally, as *amplified design practice*.

Following Wittgenstein's notion of "language-game" (1953), we acknowledge that the word "amplified" is used differently depending on the context, with different families of meanings (Wittgenstein 1953). Therefore, in the context of this study, it could be said that the word amplified will be used in the language-game of Attitudes in Design.

Regardless of design discipline, the proposal of this term is intended to provide a frame for a specific intake on design, by assigning a tangible word to a set of implicit attitudes and mindset.

The term "amplified" was purposely chosen, referring to the metaphor of audio waves that invisibly vibrate in the atmosphere increasing the intensity and reach of the audio signal. This also includes the notion of sonar due to the reciprocity of design interactions.

The intensity and reach of the audio signal refers to an expansion from systems thinking towards integral thinking and a people centred approach (that includes ethics and empathy) that also includes a world centred approach (focusing on sustainability).

The sonar dimension of this metaphor refers to the signal that is emitted and that echoes back in multi-directions with more information, and unpredictable reach. Similarly, it could be said that the 'designers' antennae' emit sonar waves which allow them to perform *autopoiesis* (Maturana and Varela 1980), and reposition themselves in response to returning echoes. In an amplified practice context, this *autopoiesis* can be fostered by deep reflection and situated empathic awareness.

The notion of amplification used here welcomes and works not only with complex contexts and issues but also with contradictory aspects and contributions to a design project. This study seeks, therefore, to better

define the characteristics of an amplified practice of design from a systematic review of literature, and to evidence these characteristics through fieldwork.

DESIGN EDUCATION FOR AN AMPLIFIED PRACTICE

The above world scenario and the relative transformations in design practices are leading education organisations to change educational paradigms (McArthur 2010, Canton 2006, Touraine 2007, Fleming 2013) by creating new pedagogies to answer to the future professionals' needs, unknown markets, and emergent societal cultures (McArthur 2010). A growing body of literature argues for more flexibility in models for Higher Education in Design (Martin 2010; McAra-McWilliam 2007; McWilliam and Haukka 2008) focusing on thinking over methods (Tschimmel 2006), responding to the above characteristics of emerging design practices. According to McAra-McWilliam (2007) a new model can better prepare the future workforce to embrace ambiguity in processes and welcome complex and paradoxical realities in order to produce innovative solutions. Gornick and Grout (2008) also argue for a need for change from a 'discipline-specific culture' to a broader approach open to other disciplines, methods and practices. An emphasis on the development of capabilities like critical thinking, insight and analysis will be needed from future educational models, state Davies, Fidler and Gorbis (2011), as a response to the current global context.

INTENDED METHODOLOGY

This research intends to follow an interpretative paradigm through the use of a Qualitative Case Study (QCS). This empirical in-depth investigation of multiple contexts (Farquhar 2012) will allow the finding of patterns and practices that are emerging in the field, and to compare these to literature terms.

An amplified practice of design is still ill-defined in literature as well as design educational approaches for the training of this type of practice. Therefore, it demands for a field approach to inform new insights, relate these to the current discourse, and offer clearer definitions.

Here, the QCS pluralistic position recognizes the objective and subjective dimensions of phenomena and its contexts (Baxter and Jack 2008). This is aligned with Integral Theory (Wilber 2006), the fundamental principles of which are useful in this research, so that an integral perspective can be adopted to build a comprehensive and robust understanding (Wilber 1997, 2006) of what is being explored.

Results of this investigation are intended to inform the creation of pedagogical tools to be piloted in the field.

PROVISIONAL FINDINGS

The following findings are based in this study's literature review, therefore, will suffer reviews resulting from insights that can emerge from the fieldwork and further literature analysis.

At this point it is possible to provide a first attempt to list the main characteristics of an amplified design practice (see Figure 3). Based on the literature, and at this stage it can be said that an amplified practice is a designers' position, not a new design specialisation. It can be understood as an emergent concern about the designers' approach to the world's growing complexity. It is an integral position (systemic and holistic) especially useful in complex design scenarios to answer the new generation of wicked problems (Hobday et al. 2012).

Amplified refers to a deeper level of practice bringing the designers' reflective skills to a transformational level and their practice to a cultural level. A first approach to describe the main characteristics of an amplified design practice is presented below in Figure 3.

Acts at human- and world-centred strategic levels *(DeKay 2011, Fleming 2013, Giaccardi 2005, Lawson and Dorst 2009, Tham and Jones 2008, Wood 2010)*
- Designer as an agent of change with strong ethical and sustainable concerns, acting at a cultural level.
Shows integrative behaviours informed by a systems perspective and a holistic perspective *(Cross 2011, Giaccardi 2005, Imbesi 2011, Hobday et al. 2012, Tham and Jones 2008, Wood 2010, Wrigley and Bucolo 2012)*
- Creation of synergies - Welcoming objective and subjective perspectives - Ownership of design solutions is collective
Focus on mastering social skills *(Han 2009, Inns 2013, Michlewski 2015, Myerson 2010, Wood 2010, Wrigley and Bucolo 2012)*
- Empathy - Emotional intelligence - Mediation and facilitation of processes and relations - Creation of shared motivation and cultural alignment
Visualisation of the intangible for insight and communication *(Inns 2013, Lawson and Dorst 2009, Poynor 2011)*
- The aesthetic aspect of visualisation works here as a tool to discover new insights and to communicate.

Figure 3 - Characteristics of an Amplified Practice of Design

Findings from literature regarding design education approaches towards an amplified practice are still in development and are not as advanced as the previous topic. Nonetheless, a variety of new curricular structures in design education express a growing sense of empathy and equity towards a higher level of integration (Fleming 2013).

CONCLUSION

Through a distinct approach to design education, the used methodology and the results from this research intend to provide theoretical and practical knowledge to enrich postgraduate design programmes related to emergent, leading-edge design practices that show an amplified perspective. It is also intended to provide inspiring tools for design educators to help prepare students to work in the current and future complex scenario.

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