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Notes on the Value of a Design PhD

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#design phd

#practice based research

#design education policy

#academic value production

Much has been written about practice-based research – and design-based research, specifically. In the vast body of literature and growing discussions about PhD studies in design (Durling 2002; Schwarzenbach and Hackett 2015; Vaughan 2017; Vaughan and Morrison 2014), strong arguments have been raised to persuade 'traditional' academia to allocate design its proper place and acknowledge design research as a scientific methodology – and accordingly, to provide design researchers with PhDs (Anderson and Shattuck 2012; Goff and Getaenet 2017; LaMere 2012). This paper joins this effort by reframing this discourse's fundamental assumptions and motivations while offering a theoretical framework that grounds the disciplinary hold in the academic realm.

Although widely discussed, it seems that the discursive elements surrounding a PhD in design remain somewhat narrow, focusing on whether the methods used in design are scientifically appropriate. This limits much of the discussion to the technical perspective, as it is rooted in a traditional academic standpoint and attempts to fit design into it. Meanwhile, an increasing number of research funds, particularly in Europe, turn to design and art when innovativeness is required. Growing numbers of multidisciplinary development teams have been formed in Horizon Europe and similar programmes, and design-orientated laboratories are mushrooming in research universities as well as design schools. The combination of science, art and design is both natural and synergetic. This is an additional testimony to the pivotal contribution of research in art and design, which, thanks to the programmes' multidisciplinary and cross-disciplinary nature, produces new value that is already widely recognised outside academia.

For many centuries, academia has created mechanisms to ensure high-quality standards in both research and teaching in its persistent struggle for the advancement of human knowledge. Crowning entitled doctors of philosophy as the teachers of wisdom with the love thereof is the highest mark of commitment to the advancement of knowledge. A PhD testifies that its bearer is a researcher – a professional who has gained profound knowledge in a discipline studied for years, refined their analytical and critical skills and experienced methods of various types and is currently capable of conducting autonomous, ethical and reliable research to share with other members of the scientific community and expose it to their peer criticism. The researcher's goal is to contribute to the production of knowledge and, more broadly, to our understanding of the universe.

It is our view that the procedural and institutional questions related to academia will be more readily answered if we are able to point out specific values produced by the design PhD – to show, in other words, what this academic framework and possibly no other can contribute to human development and to the advancement of knowledge. In what follows, we propose a tentative, non-exhaustive list of directions to articulate the value of a PhD in design, in terms of (1) the advancement of knowledge as to that which is present, (2) the revival and renewal of that which is past and (3) the development and moulding of that which is still in the future.

Present

Our first suggestion is the broadest and, admittedly, the vaguest. It is, however, possibly the most important because it highlights how much work still needs to be done. In his *Principles of Psychology*, William James writes, *'There are two kinds of knowledge broadly and practically distinguishable: we may call them, respectively knowledge of acquaintance and knowledge-about'* (James 1890). By 'knowledge about', James refers to theoretical knowledge and knowledge of relations, while by 'knowledge of acquaintance', he refers to a tacit form of practical, experiential knowledge – knowhow broadly conceived. This distinction was a precursor to Martin Heidegger's distinction between the 'present at hand' and 'ready

to hand' relations to objects. According to Heidegger, there are two different modes of encounter between us and the objects around us: theoretical (present at hand) and practical (ready to hand). Like James, Heidegger insists that there is a class of knowledge concealed in the theoretical mode and revealed in the practical mode. In his words,

> *No matter how hard we just look at the 'outward appearance' of Things, in whatever form this takes, we cannot discover anything ready-to-hand. If we look at Things just 'Theoretically', we can get along without understanding readiness-to-hand. But when we deal with them by using them and manipulating them, this activity is not a blind one; it has its own kind of sight…* (Heidegger 2008 [1927]

Heidegger further defines theoretical knowledge as secondary ('derivative' Heidegger 2008 [1927]) to practical knowledge, which he regards as 'primordial'. Twentieth-century philosophy introduced additional analyses of knowledge as exceeding theory and language, such as Wittgenstein's discussions of 'showing vs. telling' his analysis of language as founded on praxis and his later discussions of the concept of qualia (see e.g. Nagel 1974 and Jackson 1982). This line of thought has never been abandoned, and in recent years, it has been further developed by scholars such as Tim Ingold[1] and Fred Nickols[2].

If these great thinkers are correct, if there is indeed a form of knowledge that is only manifest in practical engagement – a realm of knowledge that evades language and theory but is manifest through handling objects through bodily experiences and through active processes – then academia must harvest it. It cannot limit its forms to those concerned with description and theory. It must continue to invent, define and develop pedagogical frameworks, processes and criteria to produce and assess this form of knowledge[3].

Past

The European Commission's guidelines on cultural heritage note that '*Cultural heritage enriches the lives of people … [and is] a driving force for the cultural and creative sectors … [as] an important resource for economic growth, employment and social cohesion*' [4].The importance of cultural heritage includes, of course, practices from the his-tory of design. These are preserved in museums and sometimes studied, in a theoretical manner, in archaeology, art history and cultural studies departments. The design PhD, however, offers new paths to study them; it allows reproducing them, making use of them, renewing them and developing their offspring. It does not see them as dead emblems; rather, it can bring them back to life. Design handles cultural heritage with an active, creative and innovative approach that transforms the historical into an integral component of present and future progress.

Future

As the Institute of Electrical and Electronics Engineers (IEEE) notes, autonomous and intelligent technical systems, alongside their immense benefits, '*are also raising concerns about their impact on individuals and societies. … Because of their nature, the full benefit of these technologies will be attained only if they are aligned with society's defined values and ethical principles*' [5]. Some of the concerns regarding recently developed technologies have become a matter of consensus – social networks harvest our data and put our privacy and potentially freedoms at risk. AI algorithms are biased, apps are addictive and the list goes on. We *talk* about it a lot and have made great progress in analysing and theorising over technology through media studies, critical theory and so on. From Marshall McLuhan (1967) to Nick Bostrom (2014), Shoshana Zuboff (2018), Taina Bucher (2018) and Kate Crawford (2021), researchers and scholars have raised and articulated anxieties about technology.

In parallel, and for the most part out of complete disregard for these criticisms, technology is being developed in full steam in the 'free market' of neoliberal capitalism, where success and advancement are measured by profit. There are few academic spaces from which alternatives to this scheme can emerge, and the design PhD is among them. The possibility of developing technological alternatives that are wedded to critical thinking and divorced from capitalism is crucial. The design PhD can enable it. It has already formed a tradition of cross-disciplinary action with regard to technology; it has already embraced critical theory; and it has already embarked on the framework of 'human-centred design'. It can generate new technological forms that will better serve humankind.

Producing Value

A discussion of the value added by design PhDs must be developed and, no less importantly, incorporated into the structural academic mechanisms developed to support it. Once such value has been acknowledged, the next step is to flesh out the specific skills it requires, theoretical frameworks that can support and advance it and pedagogical strategies that can enable it.

The Bologna Process, which has shaped the European higher education world over the past two decades, has divided the academic training process into three cycles: (1) studies for a bachelor's degree at a standard scope of credit points; (2) studies for a master's degree at a standard point of credit points; and (3) a large variety of doctoral programmes, from the classical university doctorate to independent research recognised by an academic institution. This process has been designed largely to adjust to market forces and to meet the new demands arising from the EU's aspiration to become the world's most competitive knowledge-based economy and the economic needs of member states (Damro & Fiedman 2018).

This has resulted in surprising flexibility with regard to the third cycle, which opens up numerous paths for design PhD development.

Research programmes in design allow designers to pursue experimental, intellectual, creative and innovative projects aimed at value production taken broadly. Clearly, this requires a coherent and coordinated policy by higher education systems, governments and creative communities to determine the skills 'design doctors' will have to master and form a consensus on with regard to the ways these skills will be acquired. In times of rapid change, academia must keep up.

Notes

1. See esp. Inglod's analysis of the 'art of inquiry' in Ingold, Tim 2013. *Making.* Routledge, p. 6.

2. See also Yeo, Jesvin Puay-Hwa. 2014. "An Overview of Research Methods in Visual Communication Design Education." *International Journal of Design Creativity and Innovation* 2 (1): 51–62.

3. On the impact of academia's self-perception and orientation on its institutional structure and assessment mechanisms, see Jacob, Marle. and Tomas Hellsttrom, eds. 2000. *The Future of Knowledge Production in the Academy.* Open University Press. See also the 2005 Bologna seminar on Doctoral Programmes for the European Knowledge Society: *'The core component of doctoral training is the advancement of knowledge through original research'*, and therefore one pressing need is *'The promotion of innovative structures to meet the challenge of interdisciplinary training and the development of transferable skills'*. https://eua.eu/downloads/publications/salzburg%20recommendations%202005.pdf

4. https ://ec.europa.eu/culture/cultural-heritage/eu-policy-cultural-heritage

5. IEEE . 2019. Ethically Aligned Design, p. 3. https://standards.ieee.org/content/dam/ieee-standards/ standards/web/documents/other/ead1e.pdf?utm_ medium=undefined&utm_source=undefined&utm_ campaign=undefined&utm_content=undefined&utm_ term=undefined

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Bio

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