

Unlikely Bridges, Unexpected Circumstances: Testimonies of a Doctoral Program in Design in Porto, Portugal, 2011-present

Heitor Alvelos

56–65

This article expounds on the chronology of a PhD programme in design hosted by the University of Porto in cooperation with the University of Aveiro since 2011. Scientific, strategic, pedagogical and administrative occurrences and decisions are narrated and substantiated. Various challenges, as well as approaches for their resolution and/or mitigation, are presented. It is argued that an affective component is crucial to the success of the programme, made possible by the development of immersive research environments and working partnerships between student projects and external contexts (research centres, businesses, cultural agents, multidisciplinary and internationalisation). A focus on the impact of the COVID-19 pandemic on course management and narratives is presented. It is argued that, in the post-pandemic era, the core challenges now reside in the maintenance of weak ties and affective components towards a stronger sense of community.

#design research

#doctoral studies

#research during COVID-19

#multi-disciplinarity

#portuguese research.

Introduction

This article is an empirical recount of the author's experiences as the founder and course director of a doctoral programme in design at the University of Porto (PhDD-UP). The course was formalised in 2011, following an edict by the Portuguese Ministry for Science, Technology and Higher Education requesting the creation of curricular infrastructures for all PhD degrees in Portugal. Prior to this, most doctoral degrees on offer were mainly, if not exclusively, supported by individual supervision. The ministerial decree thus rendered it mandatory for all doctoral degrees to include curricular components, structurally mirroring the ones already in place for bachelor's and master's courses, with specific training in research methodologies and subject-specific topics providing full integration within the European Credit Transfer and Accumulation System (ECTS), as well as the possibility of recognition (and accreditation) of previously developed research and relevant project-based activities.

Within the scope of this article, the focus resides primarily on the course environment at the University of Porto, and references to the course should henceforth be interpreted as such unless otherwise stated. The reason for this resides in the fact that the article is authored by the former course director at the University of Porto, and an empirical recount must therefore, in fairness, be constrained to the author's particular universe of an unmediated ongoing experience.

Motivation

The doctoral programme in design was conceived as a direct consequence of the aforementioned decree; however, further factors contributed to its poise at the time of its creation:

- a. The foundation of the Institute for Research in Design, Media and Culture

(ID+) in 2008, a consortium aggregating two universities in Northern and Central Portugal (the University of Porto and the University of Aveiro). This subsequently welcomed representatives and researchers from a web of further non-centric institutions (in 2015, the two original host institutions welcomed the Polytechnic Institute of Cávado and Ave [IPCA] as a third anchor institution). ID+ tends to the need for a disciplinary scale in critical mass (thus, the consortium model), as well as the distinct missions in design research that tend to stem directly from the contextual ecosystems the research itself inhabits. In the case of ID+, the focus resides in regional industries and local cultural agents and businesses. However, it must be pointed out that this primary local and regional vocation is in no way a renouncement of the fostering of national or international ties.

- b. The need to offer regional reading as a legitimate alternative to the, at the time, equally nascent PhD programme in design at the Technical University of Lisbon (subsequently merged with the University of Lisbon). Despite an excellent cooperation record, the evidence of distinct regional realities and strategic priorities (as set in the Smart Specialisation programmes of the European Commission and underlined through empirical experience) has dictated the need for a viable distinction in terms of the overall mission and applied fields.
- c. A willingness to contribute to regional development through working partnerships with industry and culture, resulting in applied research with tangible outcomes and benefits, both contextual and replicable.

- d. The fact that a first generation of PhD in design holders had been emerging in Portugal since 2003 (the date of the first Portuguese academic holder of a PhD in design) rendered the creation of a doctoral design school effectively viable and necessary, as a host of academic staff in design were gradually confronted with the imperative of holding a PhD degree as a requisite for professional advancement.
- e. Evidence that design research, as a fairly recent scientific formulation, could (and should) welcome perspectives beyond traditionally predominant geographical, cultural and semantic territories.
- f. The desire for the aforementioned course to mirror the research consortium, formalising cooperation between the Universities of Porto and Aveiro. As a Polytechnic, IPCA was until recently barred from offering PhD degrees; however, it is now in the process of joining the doctoral consortium.

networking, research development and thesis writing. Annually, the course delivers an open forum in which all students present their ongoing research to other students, potential supervisors, course partners, potential course candidates, MA students and guests. While the discussion is open and informal, a customised panel is designated for each student with the purpose of specific scientific and methodological input. The forum doubles as the formal moment of project approval for first-year students.

A key ingredient of the course is the immersive environment that PhDD-UP has offered since 2013. This tends to be an exception rather than the rule in Portuguese institutions within the humanities and social sciences, where the doctoral path tends to mirror the traditional classroom environment in its first year, followed by autonomous work with the supervisory team, with fairly scarce opportunities to set up an ongoing network throughout the research period. PhDD-UP students have been aware of this asymmetry and have regularly acknowledged the benefits of their particular environment as well as the role it plays in the consolidation of a sense of community, both among students and with researchers.

Description

Course admission is conducted under the scrutiny of formal requirements as well as a mandatory draft research project. The course itself comprises six semesters, totalling 180 ECTS credits, with the possibility of an extension of up to four additional semesters for thesis completion. The first two course semesters comprise modules focusing on research methodologies, scientific writing, design phenomenology and multidisciplinary seminars, a range of which are adaptable to current agendas and competences. A supervisory team is formally assigned at the end of the first year of study, once the originally proposed student projects have had the time and context to mature (these are, in effect, most often substantially revised by then). The second and third years are dedicated mostly to

For administrative reasons and imposed processual deadlines, a joint degree shared by the aforementioned universities was formalised only in 2016. It must be pointed out that this amounted to a simple formalisation and had little impact on what was already a working partnership. Beforehand, two distinct courses shared a curricular structure and a series of resources (including staff exchange), alternating their editions between academic years. The University of Aveiro has so far opened and managed the content of the first and third curricular years in the following academic years: 2010/11 (first year only), 2012/13, 2014/15, 2016/17, 2018/19 and 2020/21. During these academic years (with the exception of 2010/11), the University of Porto ensured the content of the second curricular year. Alternatively, the University of Porto has opened and managed the content of the first and third curricular years in the

following academic years: 2011/12 (first year only), 2013/14, 2015/16, 2017/18 and 2019/20. During these academic years, the University of Aveiro ensured the content of the second curricular year (Figure 1).

Despite good institutional and personal relations, as well as building a consensual strategic vision and an operative structure, the accomplishment of a working joint degree between the two universities has turned out to be one of the greatest challenges. To this day, various formal and pedagogical issues constrain full inter-institutional cooperation within the course. These include difficulties in harmonising distinct university regulations at a higher institutional level, a relative discouragement of mobility due to geographical distance, however small (roughly 70 km separate the two Universities), and challenges in harmonising a joint narrative among various distinct schools of thought and practice. However, it should be pointed out that, despite these challenges, there have been successful steps in accomplishing inter-institutional supervision, teaching staff exchange, information exchange, student mobility and, perhaps most decisively, the launch of joint scholarship calls.

Narration

The course's inaugural year at the University of Porto, 2011/12, was inevitably a tentative year, with 15 stu-

dents admitted, corresponding to a 100% acceptance rate. This was regarded as a natural occurrence, given the absence of a track record, in addition to the fact that the course director nomination occurred concomitantly with the author's sabbatical leave and a prior health-related leave of absence. Regarding the applicants' provenance, in this first call, two students were holders of Brazilian nationality, one was of Israeli nationality (residing in the Netherlands) and the remaining 12 were Portuguese.

The year began with a set of seminars expounding ongoing research by current ID+ researchers. Various students mentioned later in the year that, on a pedagogical level, these seminars tended to overwhelm them due to the volume, diversity and complexity of content involved. This was corrected in subsequent years by dedicating the first sessions to canonical definitions of research and how to revert these into the students' early (and often tentative) project formulations. This updated model has been evaluated positively by subsequent students.

The course became substantially more attractive once it ensured a ranking of 'excellent' by the Portuguese Foundation for Science and Technology (FCT). This corresponded to the concession of 10 doctoral scholarships per course edition for the following three course editions. Following further negotiation with the FCT, the scholarships were

	Academic Year										
	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Curricular Year											
PhD Year 1	UA	UP	UA	UP	UA	UP	UA	UP	UA	UP	UA
PhD Year 2		UA	UP	UA	UP	UA	UP	UA	UP	UA	UP
PhD Year 3			UA	UP	UA	UP	UA	UP	UA	UP	UA

UA: University of Aveiro
UP: University of Porto

Figure 1: Structure of curricular provision and management according to academic years. *Source: author.*

split with the doctoral degree of the University of Aveiro, thus corresponding to a total of five scholarships per year from 2015/16 onwards, for a total of five course editions.

The 10 scholarships offered in coordination with the 2013/14 call ensured an exponential jump in competitiveness and admission ranking; furthermore, internationalisation – a stated strategic course goal – continued its increase with the admission of students from Portugal, India, Turkey, Serbia and Bosnia-Herzegovina. The international appeal is ongoing, and as of September 2020, the joint course had been able to attract students from a total of 15 countries: Portugal, Spain, the United Kingdom, France, Brazil, Mexico, Finland, Israel, the Netherlands, India, Turkey, Serbia, Bosnia-Herzegovina, the United States and Poland. Additionally, students' prior professional experience has included placements in Japan, Greece, Italy, Belgium and Germany, and mobility programs have also ensured further reciprocal exchanges with Colombia, Spain, Finland and Turkey. China has followed up in 2023. As a consequence of this process of internationalisation, the course began to ensure a bilingual (English/Portuguese) learning environment, maintained through bilingual classes, live translation and supplemental written course materials.

A second layer of outreach has been strategically cultivated through the encouragement of multidisciplinary approaches to root themselves in the doctoral projects themselves. This has been fostered by the acceptance of students with provenance from other scientific backgrounds, as well as, when needed, the recruitment of co-supervisors from other disciplines. Examples of the presence of these disciplines in the course include chemistry, engineering, health sciences, anthropology, sociology, urbanism, history, gender studies, visual culture and architecture.

The status of excellence conferred to the course by the FCT further facilitated the setup of the afore-

mentioned immersive studio, which to this day hosts ID+ and the doctoral programme by means of a protocol with the University of Porto Science and Technology Park (UPTEC). A studio space was provided by UPTEC at its Creative Industries Incubator Centre, now repurposed as a multivocational hub in downtown Porto. The partnership with UPTEC stemmed from a mutual belief that daily conviviality would facilitate and foster cooperation between researchers and start-ups and, as such, was set up as a pilot project involving doctoral design research and start-up culture. This cooperation has occurred to a degree, namely in reciprocal consultancy, joint funding bids, joint participation in European networks, mentorship, masterclasses and think-tanks; however, it has yet to fulfil its entire potential, as the convergence of funded research and operating businesses has brought about an evident disparity in tangible goals (i.e. a scarcity of time on the part of businesses for exploratory endeavours) in addition to evidence that a joint R&D culture can hardly be implemented by decree but rather grows organically from the interest of potential participants. Perhaps the best example of these weak ties has been a formerly neglected piece of land at the end of the UPTEC garden that was turned into a small farm by PhD course students and kept as such between 2014 and 2016. It was then gradually handed over to Noocity, a resident business specialising in urban farms.

A similar observation can be made regarding what, at first sight, may be looked upon as a set of ideal circumstances. Both the daily use of the studio and the prospect of consolidation of a design research school via provided scholarships have made evident that time is needed for it to be fully implemented. The studio has offered exceptional means by any standard – namely, 24/7 access, a reception and fully equipped modern infrastructure in downtown Porto. As such, it certainly rises above the average infrastructure that the university premises could provide the students. If nothing else, for reasons of space optimisation, even PhD students

at the University of Porto are often constrained by classroom logic. Yet, the fact that the studio and its multiple assets were provided at UPTEC did not correspond to an immediate accession on the part of students and researchers. Despite their funded full-time status, most students initially chose to work elsewhere and only gradually came to inhabit the studio on a regular basis outside of designated class time. Similarly, the desire to converge student projects with broader strategic research under development at ID+ has been a gradual process, taking its first effective steps once ID+ began to ensure funding for a series of its own bids, as well as participation in various European networks.

With this broader time span in mind, by 2019, the ID+/PhD studio had effectively become a hub where students, researchers and administrative staff ensured an informal collaborative environment on a daily basis. Meanwhile, collaborations with UPTEC further ensured the placement of students in European networks, as well as a pilot post-doctoral project with the traditional shoe industry, and the provision of joint seminars.

Worthy of mention is a vertical axis of cooperation whereby PhD students are invited to participate in seminars and projects at the BA and MA levels. This involves providing lectures on their own projects, providing advice on specific projects by BA and MA students and coordinating workshops geared towards research and project methodologies. Reciprocally, MA students are encouraged to attend the PhD forum as part of their exposure to research methodologies in design and are equally encouraged to engage PhD students and graduates in the co-supervision of their projects whenever appropriate.

PhD students have also been encouraged to develop a design research outlook that is closer to canonical models of science rather than investing in a model of creative, self-reflexive singularity. This effort has included the following:

- a. A range of seminars with researchers from other disciplines in which, besides learning the underlying principles and methodologies, students are invited to find their own transdisciplinary bridges. The motto that traverses these seminars is the question, “How can design research complement this discipline/project?”
- b. The mandatory submission of articles to design and multidisciplinary conferences from year 2 onwards.
- c. The mandatory participation at *Encontro com a Ciência e a Tecnologia*, the annual Science Summit promoted by the Ministry for Science, Technology and Higher Education, at which delegates congregate from a large number of national research centres and associate laboratories. Students from all national PhD degrees are invited to submit posters. The PhD in design course has been represented yearly since 2014 through poster submission, in-person demonstrations and attendance, enabling students to gain broad exposure to multidisciplinary environments and networking opportunities.
- d. The yearly organisation (again, alternating between the Universities of Porto and Aveiro) of an international peer-reviewed doctoral conference since 2012, professionally managed by students as part of their second-year activities. Despite its systematic success both in terms of submission volume and as an effective learning tool and agent for community consolidation, the model is currently under revision, as general consensus and evidence point towards an excessive toll on the advancement of individual student research.

The overall philosophy, cultivated and communicated to the students, is that while each of them writes a thesis, together we are writing a course. This entails the establishment of course streams (at present: Design for Science/Design as Science, Design for Entrepreneurship and Design for Citizenship). Applicants are encouraged to subscribe to one of the streams and substantiate their particular investments, thus paving the way for individual contributions to a broader strategic vision that precedes their applications. Design for Science/Design as Science, in particular, has provided a key territory of reflection and exploration whereby design research attempts to legitimise itself as a scientific discipline both by proving its assets towards other disciplines and by appropriating external goals and methodologies. Further consolidation of this cooperative rationale comes via the inclusion of PhD research in ongoing projects at ID+. Furthermore, an editorial front managed by the students is in place since 2015, publishing a series of manuals on PhD pragmatics based on the students' experience (Doctor Tiger series; volume 6 in preparation as of January 2025).

Course completion rates were tentative in early editions, particularly those that did not receive direct course funding, but they have since settled at around 90%. Direct funding from governmental programs, ended in 2018, does not seem to have had an impact on this positive completion record besides extending the length of research. Efforts are being made to address this change in circumstances by further investing in the strength of student scholarship applications in nationwide programs.

As a natural consequence of the above philosophy, course graduates tend to remain in touch and maintain occasional cooperation. Besides academic career advancement, their professional outlets after graduation have included university appointments, management posts in NGOs, innovative business and cultural endeavours and placements in various research centres as project managers and coordinators.

It should be clear by now that this exercise in cultivating a collective cumulative vision extends far beyond the formalisation of a set of infrastructures, partnerships and course streams; it includes a range of subjective and affective components that can only be cultivated through daily contact, horizontal networking and a style of accessible governance in fair (and deliberate) opposition to a local tradition for a rather formal, hierarchical means of communication in educational environments.

The COVID-19 Challenge

We believe the above components were essential in maintaining the advancement of the course when the COVID-19 pandemic suddenly disrupted daily routines from mid-March 2020. As the Portuguese government declared a national lockdown on the second week of March, the ID+/PhD studio closed, in compliance with the state of calamity. Students, teachers and researchers found themselves meeting via video-conference, and for the first few sessions, the common concern could not be further from the research itself. The shock of the situation was mutually evident and often needed tending to on a personal level. A sense of bonding that prevailed in the course through the aforementioned daily conviviality was thus oddly intensified.

Once the general mood was fairly stabilised, the concern shifted towards the viability (and available formats) of online teaching and networking. It soon became evident that a full-day session every Friday (as had occurred on a formal level) would not be replicable online: all agreed that the length of the in-person sessions would be exhausting if replicated in this way. The consensus was, therefore, to redistribute class time throughout the week, ensuring a working model that could handle the increased attention stress that is naturally woven into online communication.

From this point onwards, shorter, more frequent sessions gradually stabilised into a working model,

while maintaining an undercurrent of mutual solidarity. Some of the students displayed understandable levels of anxiety in the face of the situation, particularly those undergoing confinement periods on their own. The expression of these feelings was welcomed by the group as a common duty of reciprocal care and reassurance and became an important element in ensuring that research work could effectively be reactivated. The informal quality of classes was thus embraced by all involved on the common understanding that the research at stake demanded the ability to adapt to the unfolding, perplexing circumstances. Gradually, students were able to refashion their work plans, including methodological approaches in various instances, as fieldwork was out of the question for the then-foreseeable future.

Proof of the viability of ongoing PhD work in a confined yet stabilised environment was the students' ability to fully submit individual scholarship applications to a national FCT call in April 2020. Furthermore, the customary Yearly Course Forum was successfully organised and conducted over three days in June, with all students successfully presenting online and able to vouch for a viable research plan. In the meantime, a range of external guests connected successfully, and the overall focus seemed to increase. Additionally, between late July and early September 2020, two PhD vivas were successfully conducted via video-conferencing. The most relevant indicator of success, however, was undoubtedly the attainment of an 80% success rate in individual FCT scholarship applications, followed by a 100% success rate the following year. A Doctor Tiger publication, the fifth in the series, was additionally dedicated to the experience of the pandemic by doctoral students.

The pandemic is by now a memory, but various of its challenges paradoxically ended up becoming course assets. Video-conferencing has facilitated a greater flexibility in tutorials and guest lectures; students led a global doctoral forum regarding the

effects of the pandemic on doctoral studies, and subsequently co-authored a paper on the subject, presented at The European Conference on Arts, Design & Education (Porto, July 2022).

In truth, the actual dynamics of the course seem to have suffered little as a result of the pandemic. Video-conferencing and digital storage platforms, in addition to full commitment from staff and students, have ensured excellent levels of continuity in terms of outputs (scholarships, partnerships, conference presentations).

The challenges of the post-COVID era seem to reside elsewhere. Rather than the mechanics of the course, they are reliant on stable infrastructure and the sheer will of all involved. A post-COVID community has been largely unable to maintain the prior ethos of daily conviviality. Cultivated gradually over the last decade and consolidated via an immersive studio and shared infrastructure with a business incubator, this conviviality has essentially been put on hold since the pandemic. At the moment, this is not a particularly challenging front among students in advanced curricular or thesis writing years. An internal bonding process has already been cultivated, and it clearly reverberates in online environments with the unexpected layer of an added common resilience to maintain it. The actual difficulties are more pressing when it comes to external conviviality, but the sense of community and reciprocal duties for incoming students starting their PhD journey remains intact. It is early to foresee the full impact and consequences of this scenario; however, the commitment remains to adjusting and reinventing the course's strategic and pedagogical approaches as the needs unfold.

Upon reflection, it makes sense that in the current post-COVID scenario, the main challenge of the course still resides in the field of the subjective. Just as conviviality and team spirit proved to be the tactics for 'writing a course', so too the range of contemporary uncertainties will trigger further

explorations of the affective. All of these, somehow perversely, may tempt us to define the present scenario of multiple crises as itself a deeply urgent and impactful design research project.

Further information at:

<http://endlessend.up.pt/design>

<http://doctortiger.wordpress.com>

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Bio

Heitor Alvelos is a design researcher, teacher and professional, as well as a sound and audiovisual artist. He obtained his Master's degree in Visual Communication from the School of the Art Institute of Chicago in 1992 and his PhD in Design from the Royal College of Art (London) in 2003. Heitor is currently Full Professor of Design at the University of Porto, where he served as Course Director of the PhD in Design from 2011 to 2024. He is a member of the Academia Europaea, Vice-President of the European Academy of Design since 2024, and former Chair of the Scientific Board for Humanities and Social Sciences at the Foundation for Science and Technology (Portugal) from 2016 to 2022.

As a researcher, he coordinates the Unexpected Media Lab at the Institute for Research in Design, Media and Culture (ID+), a hub for projects such as Anti-amnesia (FCT/Compete2020) and An Infodemic of Disinformation (FCT Exploratory). Heitor curated the FuturePlaces Medialab for Citizenship, in association with the University of Texas at Austin, from 2008 to 2017.