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Re-storying design research: A case study in the context of postgraduate studies

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Abstract

In the recent five years, the predominant approach followed in the context of postgraduate research in the field of design at Stellenbosch University (SU) has been practice-led. This reflects the Visual Arts Department's integrated, process-oriented philosophy of design. We regard design as an inherently relational practice that connects people, things, places, and ideas, among others. Through the integrated and applied use of multiple media formats. We do not focus solely on the outcome of our practice but are rather interested in using our practice to work towards a more just and sustainable future for all.

The research this paper reflects on engages with two specific practice-led research projects done in completion of the MA in Visual Arts programme at SU; both of which were situated in the broad field of visual communication design. The aim was to gain insight into the kind of structures, skills, and practices that can support and facilitate practice-led design research in the future. Research participants included the two graduates completing these projects and their supervisor. The research was approached from a new materialist perspective and a narrative methodological approach was followed. From this perspective, the cases in question are not merely represented as it unfolded. The projects have been collaboratively re-storied through creative play between image and text to focus on the transformation of future possibilities. It was found that, in the context of practice-led design research, research questions were predominantly geared towards how design practice can reach specific goals, all the while also affecting positive change in real-life contexts. Navigating the entangled relationships between theory and practice was a continuous struggle, as was situating the research within generalised and bureaucratic institutional structures. Finding the most effective way to ultimately present each project as a comprehensive, coherent body of knowledge was similarly challenging. Our story demonstrates that there lies value in participation, collaboration, reiteration, conversation and multimodal material and technological engagement. The subtle nuances emanating from our story indicate that postgraduate programmes engaging in design research at South African higher education institutions could benefit from simultaneously incorporating a more narrowly defined disciplinary focus *and* strategically situating their offering in an extended, transdisciplinary community.

Keywords: Design research, practice-led, postgraduate studies, specialisation, transdisciplinarity.

Introduction

I am Karolien. In a professional capacity, I am a visual communication designer, creative researcher, mentor, and teacher, and acted as academic supervisor for Hesté and Kirsten during the completion of their MA studies in Visual Arts at SU.

Hi, I'm Hesté. And I'm Kirsten. We're both visual communication designers who completed our MA journeys during 2021-2022.

In this paper, the three of us reflect on our collaborative journey in design research; a journey characterised by many ups, downs, and valuable lessons learned. We are interested in exploring the kind of structures, skills, and practices that can support and facilitate productive design research in the future, specifically in a South African context.

Considering design research

Design research in context

Design is inherently a verb. It is a creative practice "aimed at changing existing situations into preferred ones" (Simon cited in Brassett & Marenko 2015, p. 11). It is systematic in its approach, but holds ample room for complexity, uncertainty, and imagination in its processes. It is future-oriented, iterative, and involves the hands-on making of things, ideas, systems, media, and/or experiences. It does not simply aim to solve existing problems, but rather wants to "reframe ideas [and] imagine problems and opportunities to see whether something is necessary or not" (Koskinen et al. 2011, p. 8).

Research, on the other hand, has historically been informed by the scientific tradition where objectivity is key and linear, rational thinking triumphs. Methodologically, this tradition has become a global norm (Haseman & Mafe 2009). It has come to constitute the dominant framework in which postgraduate research programmes at higher education institutions function.

Defined in this way, and putting linear, scientific logic to practice, Design + Research = ERROR. The paradoxical nature of design research as a consolidated concept/practice is not a new insight. It has been considered extensively from a variety of perspectives throughout the past century. In this paper, we will provide insight into the concept from the perspectives of constructive design research (Koskinen et al. 2011) and practice-led research (Haseman & Mafe 2009).

Koskinen et al. (2011) posit that the defining feature of design research is that it relies on *making* as practice, hence their use of the term *constructive* design research. They acknowledge that design research has always been a product of the context in which it has functioned. For example, since the sociopolitical, economic, and technological change ushered in by the industrial revolution inspired a focus on function within mass society – a one-size-fits-all kind of approach – the 'design methods movement' that briefly surfaced in the 1960s deemed the aim of design research to be to "describe the natural and human rationalities that govern it" (Koskinen et al. 2011, p. 15). However, as society became more networked, consumers' needs became more individual, and design had to adapt. It became clear that a rationalistic approach to design research was not adequate. It failed to acknowledge the real-world contexts in which design functioned. During the 1980s and 1990s, design research thus came to be characterised by human-centred, ethnographic, and participatory approaches. Since the 2000s, with the speedy development of information communication technologies, the focus has increasingly been on design practice as *method* and the experiences that this engenders (Koskinen et al. 2011).

Thinking of design as a method that can productively be put to work in real-life contexts resonates with the concept of practice-led research. Carole Gray (in Koskinen et al. 2011, p. 213) provided the first definition of practice-led research in 1996. She held that it is,

> Firstly research which is initiated in practice, where questions, problems, challenges are identified and formed by the needs of practice and practitioners; and secondly, that the research strategy is carried out through practice, using predominantly methodologies and specific methods familiar to us as practitioners.

In practice-led research, creative practice hence co-constitutes one's research method/s and may lead to insight into the practice itself and/or about the context and phenomena in question. As with constructive design research, the focus remains on action and process. Haseman and Mafe (2009) have identified six conditions for practice-led research. We believe these align well with design research and will consequently explore our design research experiences through this lens. These conditions include (Haseman & Mafe 2009, pp. 214-217):

> 1) Resolving the 'problem' of the research problem, 2) Repurposing methods and languages of practice into the methods and language of research, 3) Identifying and deploying emerging critical contexts which are networked out of his or her practice, 4) Identifying and engaging with the 'professional' frames within which practice is pursued, 5) Anticipating and deciding on possible forms of reporting, [and] (6) Deliberating on the emerging aspirations, benefits and consequences which may flow from the demands and contingencies of practice.

Situating design research locally

In their paper 'Postgraduate communication design education in South Africa: Challenges and opportunities', Van Zyl and Naude (2019, p. 344) highlight "the division between postgraduate education [in communication design] and the [professional design] industry". They conclude that,

> This gap and [...] lack of postgraduate capacity may be symptoms of the core of the problem: a discipline that is still trying to catch up with the internal shifts from being craft-based to knowledge-based, new knowledge needs and rapid changes in the workplace and technological landscape.

Industry professionals regard higher education as a provider of entry-level technical skills, and "academic research is not seen as a valid or accessible source of knowledge" (Van Zyl & Naude 2019, p. 333). The South African National Development Plan 2030 advocates for the renewal and expansion of the role South African universities play in meeting the needs of local society (NDP 2012). Subsequently, institutions of higher education are placing a high premise on the development of 21st-century skills such as creativity and critical thinking, problem solving, lifelong learning, collaboration, communication, technical skills, information management, ethical and cultural awareness, flexibility, and self-direction (Van Laar et al. 2017). We believe it is imperative that research-driven institutions offering professional degree programmes in design respond to this challenge through considering their postgraduate pedagogical offering carefully.

In the MA Visual Arts programme at SU, specialisation in a variety of creative disciplines is accommodated. Students are required to produce an integrated creative research project. According to the institutional course guide, they are encouraged to produce,

> Research that is practice-based in its methodology [...] [and] explores the relationship between practice and theory as dialogical and interrelated, not only in the process that is followed, but also in the final presentation of the research project (2023).

This must be presented in the form of a written thesis and a practical body of work; each of which is due on separate dates, the thesis 4-8 weeks before the practical work. The standard venue for the presentation of practical work is an institutional gallery space. Ultimately, a single mark is awarded to the project.

Internally, the programme is handled flexibly since it acknowledges and upholds the dynamic nature of creative research processes. Students entering the programme with a design background do, however, experience quite a bit of tension, doubt, and anxiety throughout the course of their studies. We suspect this might be because the affective force of practice-*based* work – work focused on the outcome of creative practice as a contribution to knowledge (Candy 2006) – is unwittingly ingrained in the institutional structure of the programme and hence resisting the predominantly practice-*led* research processes that design research engages in. This tension has inspired the research this paper reflects on. We are curious about the reasons for this tension and specifically the implications it may hold for design research in the context of postgraduate studies in the future. What kind of structures, skills, and practices can support and facilitate productive design research in the South African context going forward?

Grounding design research

Given our framing of design research as constructive and process-oriented, we paradigmatically situate it in an onto-epistemological framework. Karen Barad (2003, p. 829) describes onto-epistemology as "the study of practices of knowing in being". In everyday terms, this boils down to the belief that, in doing design research, one must practice what you preach.

Within this framework, a new materialist foundation supports design research. New materialism proposes that all matter has agency. Matter, in this sense, includes:

> Human bodies; other animate organisms; material things; spaces, places and the natural and built environment that these contain; and material forces including gravity and time [...] abstract concepts, human constructs and human epiphenomena such as imagination, memory and thoughts; though not themselves 'material', such elements have the capacity to produce material effects (Fox & Alldred 2018, par. 1).

From a new materialist perspective, knowledge only comes to matter – it only comes to exist, to have meaning – as different materials intra-act with each other (Barad 2007). From this perspective, new materialism is not a pre-existing theory that can be applied to the research one is doing but allows one to come to grips with the fact that new ideas and thoughts will emerge and take shape through the practice of doing research, i.e., through *designing* in our case.

Methodologically, we have combined a case study and creative, narrative inquiry approach. A case study research design was relevant since our research aimed to explore the experiences of participants (the three of us) in a specific, real-world context (Yin 2018, p. 64); i.e., we aimed to provide insight into our experiences of being involved in postgraduate studies in design research in the context of an existing MA programme. We were, however, not content with simply *describing* our experiences in this context. We wanted to excavate nuanced insight into the *processes* we were engaged in. We wanted to understand postgraduate design research in the current moment better (Sonday, Ramugondo & Kathar 2020). Integrating case study research with narrative inquiry hence made sense, as narrative inquiry allows one to reconstruct experiences in relation to a range of other people, things, spaces, places, and times (Clandinin & Connely in Pinnegar & Daynes 2007). Through integrating our individual voices through creative storytelling, narrative inquiry facilitated a means to

describe how design research worked in this case through identifying key concepts that could ground it (Sonday, Ramugondo & Kathar 2020). This, we believe, allowed us to expand the limited scope of using traditional thematic analysis (Nowell et al. 2017) to gain insight into possible answers to our research question. It allowed us to see, feel and make connections that might not have surfaced otherwise.

Given the self-reflective nature of the research, it was declared ethically exempt by SU's Research Ethics Committee. The research does, however, involve reflection on institutional structures and creative output produced by graduates. It was thus imperative to seek institutional permission to conduct the research. This was received from the institution's Division of Information Governance. All participants (i.e., the three authors) provided consent that their identities be known.

In the section that follows, you are allowed into the story that unfolded between us. The process we followed in getting there included 1) a collaborative discussion on our experiences throughout the two-year design research process; 2) each of us individually creating a personal narrative comprised of image and/or text representative of our experience of the process; and 3) us collaboratively working from the three individual narratives to construct an integrated illustrated story. In the concluding section of the paper, we provide a summary of the insights gauged and comment on the value this holds for the future of postgraduate studies in design in the future.

Our story

Hesté: My undergraduate studies were completed at a private institution with a much more commercial focus compared to SU. My expectations for this MA programme were thus uncertain.

Kirsten: I chose to do a master's thesis at SU as I was interested to learn more about a specific design-related topic. Since there are no tertiary institutes in South Africa offering master's programmes in sustainability and materials design, I sought an institution where I would have the freedom to design my own learning experience. But, upon entering the programme, I saw mostly practice-based Art approaches to the degree. All the seminars were Art-centric, so in my practice I tried to emulate this by making drawings of the trash-scapes I was creating from my own trash collection.
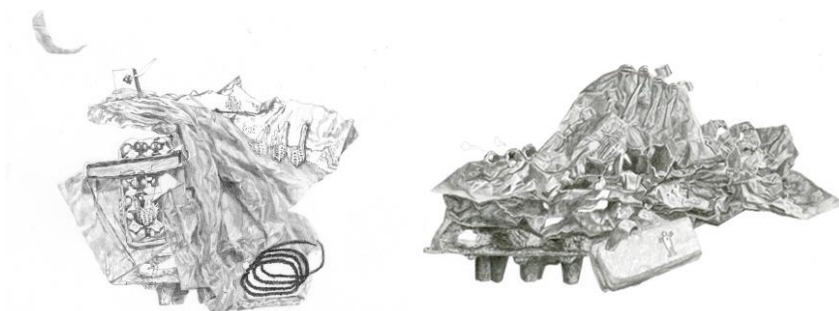
Figure 1: Kirsten 2021, pencil drawings

Karolien: I always encourage students to start *doing* as soon as possible; to think through what they read about their topics of interest by collecting, conversing, drawing, mapping, building, etc. I want them to experience their topics of interest in a material way. I believe this holds great value in the process of figuring out how their research can make a tangible contribution to a more productive, sustainable society.

Hesté: My initial focus was on making physical, multi-sensory images inspired by music.

Figure 2: Hesté 2021, multimedia illustrations

Karolien: These are beautiful images, but what do you want them to do in your research?

Hesté: Not sure… Make people 'feel' something? Make them stop, actually *look*?

Karolien: But why? Who are these people and where/how will they engage with it?

Kirsten: Collecting and drawing my trash helped me imagine alternative future realities.
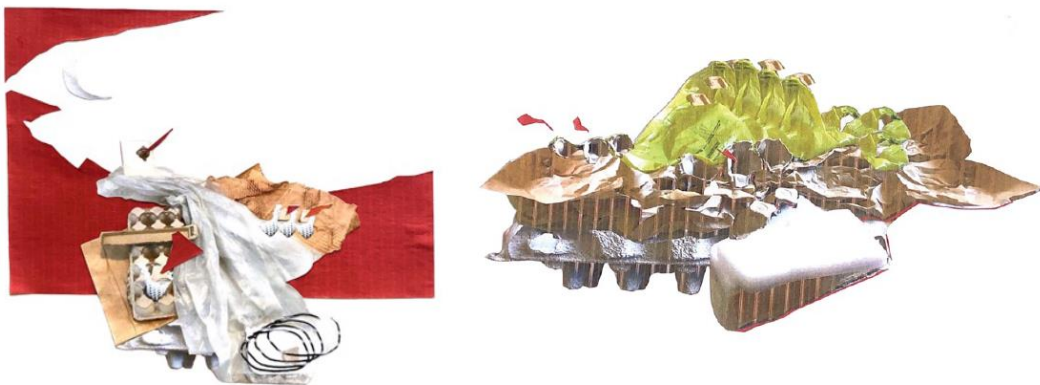
Figure 3: Kirsten 2021, multimedia drawings

Karolien: And what value can this hold in real life? How can you *use* this as part of your research?

Kirsten: I was confused. My journal entries and the quotes I collected to try and motivate myself through the beginning stages clearly show this.
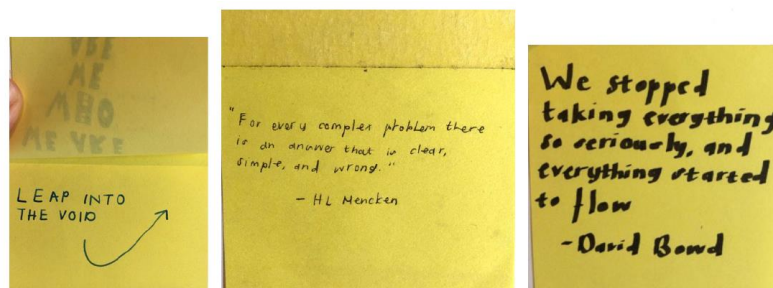
Figure 4: Kirsten 2021, journal extracts

Kirsten: Though I came into this programme with confidence that I would be able to create a design-oriented outcome, not knowing what this looks like in this context, and what would be acceptable, was daunting. It felt as if what I wanted to do was very different to what is usually produced in this context.

Hesté: I also struggled to flesh out the focus of my research, so I started to talk through my views on multimodal imagery by making examples of the experiences I had through my professional Instagram account.
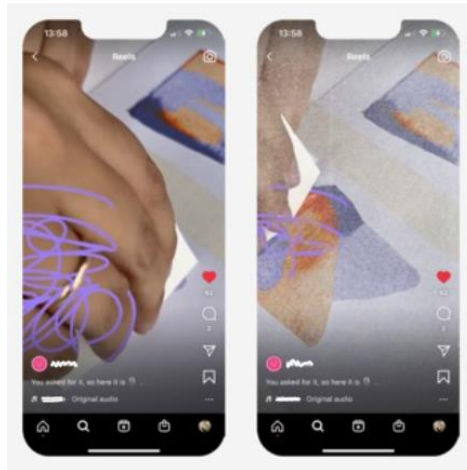
Figure 5: Hesté 2021, Instagram content creation

Karolien: What did you learn in doing this?

Hesté: So, ironically, I realised that social media lay at the heart of my research. As a freelance designer, I was frustrated by the homogeneity of most designers' Instagram accounts and was curious as to what I could do to stand out, to get more followers, and run a more successful business. I was interested in multimodal imagery because I wanted to believe that it could have potential to engage viewers more thoughtfully.

Karolien: This was a breakthrough moment for Hesté. It became clear how her *practice* (as designer on Instagram) could *lead* her research. It was now possible to connect the dots and arrive at a clear research plan.

Hesté: My research set out to explore how somaesthetic interaction design could facilitate more thoughtful engagement through and with Instagram. Methodologically, an autoethnographic approach was taken to firstly gain insight into how humans relate to sociodigital materials, specifically Instagram. Furthermore, the research involved continuous engagement in somaesthetic interaction design on Instagram to critically ascertain how it could negotiate more thoughtful engagement on the platform.

Karolien: A similar moment arrived for Kirsten through extending the reach of her design-based network by seeking out and attending a range of online seminars, conferences, and workshops that aligned with her specific design interest.

Kirsten: In one seminar, the speaker mentioned that the exhibition does not have to be an 'end'. They were attempting to communicate something important that they felt the public needed to know, and

thus used their exhibition to make this knowledge public. The speaker argued that the exhibition became part of the conversation of the research, opening new dialogues.

Karolien: I was so happy that this happened. It provided authoritative backing for the practice-led approach to design research I was advocating for. This experience allowed the puzzle pieces of Kirsten's research to fall into place.

Kirsten: I set out to explore the role that a critical, speculative kind of visual communication design practice could play in working towards a more sustainable (Fry 2020) future at SU. I firstly explored my own relationship to material, specifically trash, through design practice, then explored other humans' relationship with it; and lastly reflected on what visual communication design practice for more sustainable material futures could be.

Hesté: As part of the programme, we are expected to present our work at practical and theoretical seminars. This serves as a progress check and opportunity for feedback from the larger academic cohort. The theoretical seminars usually went well and were helpful as students and staff contribute to our understanding and scope of theoretical sources. What made the practical seminars different, though, is that we were expected to exhibit our practical work as an exercise for our final practical exam in an institutional gallery space.

My supervisor and I had many discussions leading up to my first practical seminar. We knew that my work constituted interaction design and was intended for Instagram, so we sought to come up with a solution to present this digital work in the designated physical space. I ended up placing QR codes linked to each Instagram post within the gallery space. This enabled my digital work to be experienced in a physical space, encouraging multimodal interaction.
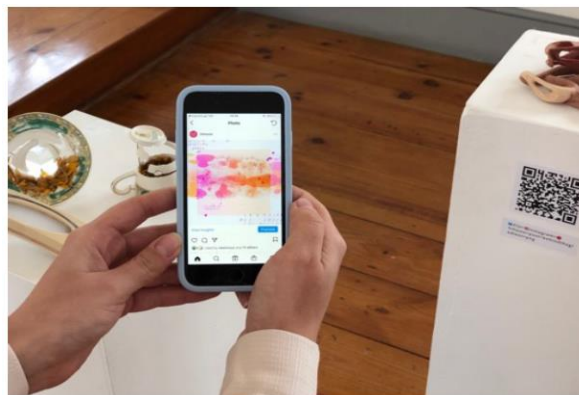
Figure 6: Hesté 2021, practical exhibition

Unfortunately, this was met with critical feedback. The feedback did not speak to what the work was trying to achieve – to its message – but was rather focused on the medium through which it functioned. It was extremely discouraging and allowed for increasing self-doubt. Why let me do my research within the broader field of design, if support is not there?

Kirsten: Our practical seminars at Gallery University Stellenbosch (GUS) were confusing for me too. The 'white cube' space tends to swallow design work. This, in combination with exhibiting our work with students from other disciplines, moulded my idea of what I should be producing to fit the space. I automatically compared my work to others' even though we followed different research processes.

Figure 7: Kirsten 2021, practical exhibition

Karolien: I found the practical seminars difficult too. Where the students were discouraged and left with feelings of self-doubt and loneliness, I experienced frustration. I mostly ended up justifying why the students' work didn't quite fit into the space it was being viewed in. This didn't feel constructive. I could see students' emotions rising during these sessions, and always jumped to organise a debriefing session soon afterwards to talk through their experiences. To be honest, I often suggested that they ignore the feedback received and continue the paths they were already on. While I have no doubt in the larger academic cohort's shared intention of supporting and facilitating all students' research journeys, the structure of the programme seems to resist the productive development of practice-led design research. It feels as if students' time, mental energy, and resources can be channelled more efficiently.

In an attempt to provide additional support, I initiated a Design Research working group with students. This provided a smaller-scale support system and more narrowly defined disciplinary community where knowledge sharing became easier.

Kirsten: Suddenly, it felt like I was in my element again, with people who understood me. We shared similar fears, had similar questions, and got stuck in similar places. It felt like I had people who could back me up and who knew where I was coming from, what I was trying to do, and how best to get there.

Karolien: I know that power lies in collaboration; in like-minded, networked community. I know that this lies at the heart of practice-led design research. But I also know that establishing productive networks and communities takes time, and that in the neoliberal context of higher education, time is generally in short supply. How can time be built into the structure of postgraduate design research programmes?

Kirsten: In the second year of my studies, I made use of a container space on campus to put up an interactive exhibition, *Trash Talks*. This became the heart of my research.

Figure 8: Kirsten 2022, interactive exhibition

Karolien: I encouraged Kirsten to do this from early on. It allowed her to consider how she could apply her work (of which a lot was quite speculative) in a way that would be accessible to a larger public audience. She also learned a lot through the process. It created an opportunity for receiving valuable feedback from her audience. This opportunity was extended by her establishing a social media presence for *Trash Talks*, thus allowing individuals to interact with the content in hybrid ways.

Below is an example of one of the speculative technologies Kirsten designed. The *Microviscopett* was designed from found materials and is intended to be used as a tool, allowing users to come to know everyday materials in newfound ways. She was curious as to the impact these kinds of imaginative tools could have in facilitating more critical acknowledgement of that which we usually take for granted.

ESPYRE
Hold this lens up to a thing you would like to know.
[found tinted plastic]

INTERPRETER
The stimulus travels through the Espyrer to the Interpreter, where the shared knowledge of the thing will become known.
[found tinted plastic]

EYEPIECE
Place this part of the technology up to your eye.
[broken stick blender]

CAPTURER
The Capturer catches the stimulus & processes it before sending it through the Eyepiece.
[found jar lid]

MOUNT
The Mount holds lenses E & F, creating distance between them and the Eye-hole.
[broken stick blender]

EYE-HOLE
Stimulus travels through the Eye-hole to the Eyepiece

Figures 9-10: Kirsten 2022, speculative design

Kirsten: I think it makes sense to think of practice-led design research as design initiatives. It shows our capacity to be change agents and allows our practice to function outside of the bubble that university can sometimes be, locating it in the real world. We can also take what we learned through the process of our studies – even the more intangible skills – wherever we go next.

Hesté: Yes! I never realised my master's would actually help me land a job abroad, but let me not digress [...] Figuring out how to ultimately present my work, especially the practical side of things, was a headache.

Karolien: The practice-led research existed in Hesté's professional Instagram account. It was documented in real-time as content was posted and responded to on the platform throughout the research process. The student did, however, synthesise and reflect on this in her thesis, which contained a range of visual excerpts and live links to the account. This document provided a comprehensive overview of the research process and could've sufficed as the integrated, final output for the degree, but the programme required an independent 'practical' exhibition over and above the thesis submission.

Hesté: My thesis was due a month before my practical exam. This does not make sense as the project is considered an integrated whole. I was, however, thankful for the extra time to prepare for the practical showcase since this received the most critique throughout the process. My supervisor and I both agreed that, as an integrated practice-led research project functioning in the context of interaction design on Instagram, the final body of work (even though multimodal) was not suited to physical exhibition format. I decided that doing an Instagram Live performance in my workspace, the space where I created the content posted to Instagram throughout the research process, could perhaps prove that digital content creation can be a valid form of design practice in a practice-led research context.
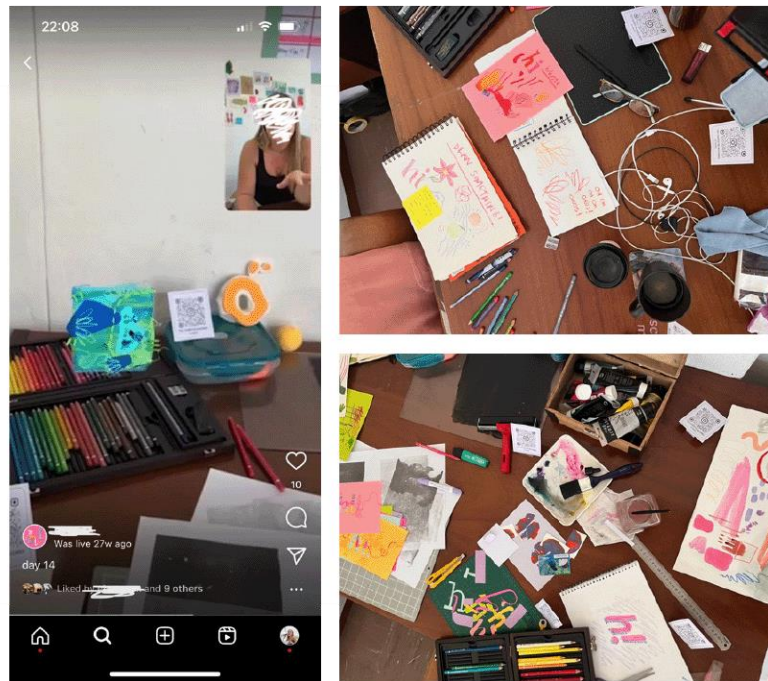
Figure 11: Hesté 2022, Instagram Live performance

I expected to do poorly due to the negative feedback received throughout, but, to my absolute surprise, I received an excellent result. This confirmed to me that practice-led design research does have value and can be well received when reviewed by those with specific knowledge in the field.

Karolien: As has been touched on earlier, there is power in numbers, and I believe we need to invest more in forging an active design research community (traversing the academy and industry) in our local South African context. This can hold value in supporting emerging designers, but also in showcasing the value design offers in broader South African society.

Kirsten: At the time of my last practical seminar, the public exhibition in the container space was running. I invited the MA cohort to visit this space before heading to the gallery for that afternoon's presentations. I did include aspects of my practice-led process work in the gallery to ensure that my work was represented there too. I was excited since I believed it would finally be possible for everyone to experience my work in the context in which it was intended to function. Unfortunately, very few people visited the container space prior to going to the gallery, and feedback was – once again – discouraging. I was disappointed. We are encouraged to exhibit outside of the gallery, but when we do, there is no time for people to go and view it.

Karolien: The world seems to be getting fuller and more complex by the second. Design functions in this world and must necessarily keep up. As design educators, it is our responsibility to provide our students with the skills they need to do this. But what are these skills and when and how do we share it? The current MA programme seems to struggle in effectively accommodating the variety of creative disciplines it houses. Despite the programme placing a high premise on integration, flexibility, and openness, characteristics in line with the general aim of postgraduate studies (i.e., of developing critical, independent thinking and problem-solving skills), design students often feel lost. I'm wondering whether it is not time to focus on more specific, specialised skills on postgraduate level? I'm wondering how postgraduate design education could be structured to allow specialisation, albeit in broader, transdisciplinary ways?

Kirsten: I got this far, and with the motivation from my supervisor, stuck to my guns. One thing I really did come to appreciate about the approach I followed was the inclusion of outside voices. It is necessary to think about how our designs are impacting the world and to work with a target audience who shapes the outcome. As has been emphasised by many designers and philosophers, designed *things* do not exist in isolation. Thus, when considering the outcomes of our projects, we need to consider what impact it may have on the community it is working with. Design research cannot take place in the comfort of one's home. So, to consolidate my work, I put together an interactive thesis document, reinstalled the public exhibition in the container space, and complemented this by showcasing everything that made up my practice-led research process within the Visual Arts Department. The examination panel started with the process work and was then directed outside towards the container. This allowed them to immerse themselves in my process and then experience being on campus in a similar way that the target audience of my research did.

[Examiner 1 2022] The honesty and incompleteness of this process work is what drew me as a reader and examiner even more closely into the journey that the candidate has travelled.

[Examiner 2 2022] The practical component [did] not simply illustrate the theory, as is often the case in integrated research projects, but here, praxis 'knot[ted]' the work – matter, concept, and method into a robust, vibrant, and entangled thing [that] opens up new lines of flight, thoughts and possibilities for [the] future.

Conclusion

In critically reflecting on our experiences of doing practice-led design research, we have come to realise that considering the structures necessary to support this form of research is crucial. In order to provide space and time to focus, we think a structured MA programme, including coursework and a mini research project makes sense. This could allow for focused training in practice-led design research skills. Contrary to conventional research methodology courses covering its historical development from quantitative, qualitative, to arts and/or practice-based approaches, we suggest that practice-led approaches are positioned first and foremost in the field of design. Practice-led design research training can be offered as a series of integrated (theory/practice) projects where students are guided through the principles of practice-led research through the application of their own practice to a selection of real-life, local case studies. How, for example, can communication design skills be used to negotiate specific cases dealing with environmental sustainability, economic development, digital technology, health education, etc.? In setting up such projects, a transdisciplinary network of collaborators could be forged in time, specifically within the larger institutional context and with immediate local industries. Simultaneous exposure to *specialised* design research skills *and* working as part of an extended *transdisciplinary* community – two things that might seem contradictory – might provide the support and focus that was missing in the case this paper reflected on. This pedagogical structure can highlight and position higher-order, 21st-century skills like design thinking, strategy, teamwork, creative direction, management, and entrepreneurship as central to the professional world by foregrounding it in and through practice, another aspect that Van Zyl and Naude (2019) have identified as lacking from South African higher education in design.

Such initial learning experiences should effectively direct a specific research focus and provide fertile ground and the necessary connections to conduct in-depth practice-led design research in applied, real-life contexts. The outcome of such research projects should be presented and submitted as a *single* integrated body of work. While the specific format should remain open, it must include a text-based narrative of the research process supported by whatever design-based media, objects,

experiences, prototypes and/or combinations thereof were relevant to the project at hand. We believe that, should this kind of structural support be in place, students would be able to function and learn more productively. It should enable a quicker graduate throughput and provide graduates with more tangible and specific industry-related value.

This research has provided a foundation for consequent research to build on. We aim to critically consider and explore the practical feasibility of restructuring the existing practice-based/led MA programme on offer at the Visual Arts Department at SU or designing and implementing a new programme in the next phase of this project. We trust that fellow design educators will be able to find value in our reflective work.

References

Barad, K 2007, *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*, Duke University Press, Durham & London.

Barad, K 2003, 'Posthumanist performativity: toward an understanding of how matter comes to matter', *Gender and Science: New Issues,* vol. 28, no. 3, pp. 801-831.

Brassett, J & Marenko, B 2015, 'Introduction', in J Brassett & B Marenko (eds), *Deleuze and design*, Edinburgh University Press, Edinburgh.

Candy, L 2006, *Practice-based research: a guide,* viewed 15 May 2023, <https://www.creativityandcognition.com/wp-content/uploads/2011/04/PBR-Guide-1.1-2006.pdf>.

Fox, NJ & Alldred, P 2018, 'New materialism', in P Atkinson, S Delamont, MA Hardy & M Williams (eds), *The SAGE encyclopedia of research method,* Sage, London, viewed 15 May 2023, <https://www.researchgate.net/publication/320016117_New_Materialism>.

Haseman, B & Mafe, D 2009, 'Acquiring know-how: research training for practice-led researchers', in H Smith & RT Dean (eds), *Practice-led research, research-led practice in the creative arts,* Edinburgh University Press, Edinburgh.

Koskinen, I, Zimmerman, J, Binder, T, Redström, J & Wensveen, S 2011, *Design research through practice: from the lab, field, and showroom*, Morgan Kaufmann, Massachusetts.

NDP 2012, *National Development Plan 2030: our future – make it work,* viewed 4 October 2023, <https://www.gov.za/sites/default/files/gcis_document/201409/ndp-2030-our-future-make-it-workr.pdf>.

Nowell, LS, Norris, JM, White, DE & Moules, NJ 2017, 'Thematic analysis: Striving to meet the trustworthiness criteria', *International Journal of Qualitative Methods*, vol. 16, no. 1, pp. 1-13.

Pinnegar, S & Daynes, JG 2007, 'Locating narrative inquiry historically', in DJ Clandinin (ed.), *Handbook of narrative inquiry: mapping a methodology*, Sage, Thousand Oaks, pp. 3-34.

Rosiek, JL & Snyder, J 2020, 'Narrative inquiry and new materialism: Stories as (not necessarily benign) agents', *Qualitative Inquiry,* vol. 26, no. 10, pp. 1151-1162.

Sonday, A, Ramugondo, E & Kathard, H 2020, **'**Case study and narrative inquiry as merged methodologies: a critical narrative perspective', *International Journal of Qualitative Methods*, vol. 19, pp. 1-5.

Van Laar, E, van Deursen, AJAM, van Dijk, JAGM & de Haan, J 2017, 'The relation between 21st-century skills and digital skills: a systematic literature review', *Computers in Human Behavior,* vol. 72, July, pp. 577-588.

Van Zyl, HM & Naude, L 2019, 'Postgraduate communication design education in South Africa: challenges and opportunities', *DEFSA 2019 conference proceedings, Designed Futures, Design educators interrogating the future of design knowledge, research and education,* pp. 333-346.

Yin, RK 2018, *Case study research and applications: design and methods,* 6th edn, Sage, Thousand Oaks.