

Promoting Potential: the dissemination and reception of practitioner-led design research

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Abstract

With the growing acceptance that research-through-design can elicit a form of design knowing, this study considers how design research might be engaged with by the community of practice the research seeks to inform. Academic literature on dissemination might usually privilege the word findings with words like verifiable, credible or quantifiable; but for future-oriented practices like design, might it be more productive to frame research findings in terms of potential and possibilities?

This paper proposes that if we understand that the realm of design is about 'possibilities' then the question becomes not just what form to adopt for disseminating design knowing, but asks the more elemental question: what is productive to disseminate? This led to questioning whether accounts of design research can be about more than retrospectively describing what happened, but rather seeking to provoke a discursive designerly engagement in another practitioners design knowing. Given the nature of design inquiry and the expertise of designers, could dissemination artifacts be designed to engage individuals within the practice community to question the potential of the design knowing for future situations.

Keywords

Practice-based Research, Design Knowledge, Visualizations

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Part I: Enabling Design Knowing and Design-oriented Research

What say we lived in a world where Design, not Science, was the dominant paradigm? What if methodologies for research were promoted for their facility to explore serendipitous tangents, rather than answer pre-determined hypotheses? What if, in this new world, knowing was evaluated by its potential to transform, not its capacity to be repeated? What if the contribution of research was legitimated by its productive ability to influence complex situations in the future, rather than for its power to assert verifiable facts about the present?

Is it because I am a designer that I start this paper with a stream of questions that ask “what if”? In the Science of Uncertainty, Dilnot (1998) writes about how the Sciences and Humanities share a fundamental interest in describing the world; in their very different ways they both essentially seek to account or reflect how the world is. He asserts the importance of noting that the way these disciplines question what is, is distinctively different to how the domain of Design seeks to make the world by asking what if.

It is through this conception of designing as an act of world-making that I am liberated to imagine a future where design-led research can be designerly in its intent, methodology and in how it is shared with others. In this world, design research would not attempt to conform to notions of hypothesis testing, repeatability or verification, but would instead assert a design-led and future-oriented commitment to how research can be evaluated. For if research through the practice of design is often framed by questions that propose new ways of looking toward the future, then could not the means by which we communicate the research also be commended for its productive potential to provoke other practitioners to ask “what if...”, or, “how about...” or “could that mean...”? In this world, design research will not seek to tell you how the world is, but to evoke a discussion of how the world could be.

I am interested here in how this line of questioning plays out with respect to what we attach importance to when sharing project-based design research. I seek to present an argument for why it might be productive to engage audiences for research by drawing them in as active participants in the dissemination process. My interest is in how we might invite a designerly engagement that motivates the audience to speculate on the possibilities the research project evokes.

This position essentially presents a critique of a prescribed framework that leads to compliance-driven dissemination. I am more concerned with critiquing current shortfalls in the agency of research by going back to the very intent behind the notion of building and sharing knowledge. Academic literature on dissemination—predictably framed by the vocabulary of the sciences—usually prefaces the word findings with words like repeatable or quantifiable. But let’s say that if we seek to build knowledge, the goal is to present knowledge that is re-usable, transferable. Our current scrutiny of the appropriateness of the dominant paradigm dictating the language and methods of design research needs to be extended to questioning the nature of knowing that would be productive to share.

To situate why and how I undertook the research study that informs this conversation, I will introduce the concerns facing the contribution, legitimacy and agency of project-based design research. With reference to the findings disclosed from a design-led research study, I will then outline an alternative perspective on how we might recognize the contribution designing can play in preparing material for dissemination.

Contribution and Research through Designing

For if we lived in a world where reductive empiricist notions of research were not the dominant paradigm, and poetic wisdom was not generally recognized as inferior to rational reasoning, then we would not only value different ways of undertaking research, but we would also cultivate alternative motivations and incentives for sharing our research with others.

Referencing Frayling's triad of rhetorical terms for art and design research (1993), I seek to unpack the research through practice category that Frayling coined in relation to research into and research for practice. A further attempt at clarification means I have elected to privilege the defining role the process plays (as opposed to simply the final artifact) by working with the phrase research-through-designing. With reference to Fallman's terms for further distinguishing the role of designing in research (namely Design-oriented Research and Research-oriented Design), I am particularly concerned with design-oriented research. Fallman defines design-oriented research as primarily a research project characterized by the researchers' commitment to knowledge creation through the process of designing. In contrast he describes research-oriented design as first and foremost a design project that deploys appropriate research methodologies to produce a designed object. I stress this point because although I recognize an argument can be made for practice qua research—with respect to design artifacts that undoubtedly influence and contribute to the field of design—in this study I am specifically considering projects that from the outset define themselves as research; not simply design projects that deploy research methodologies or research projects that investigate design. I am looking at research projects that deploy the process of designing as an investigative strategy and formally engage with the widely accepted research criteria of disseminating project outcomes.

Fallman's definition for design-oriented research does not preclude the contribution designing may bring to another field of inquiry (for example medical visualization), but at this stage I am interested in research projects that overlap with Frayling's Research-into-design category. That is, research projects where design is the subject of the research—research that seeks to theoretically and philosophically contribute to our understanding of the domain of design. I am stating all this now, because to consider the earlier question of why we would share the research in the first place, I need to first confirm what kind of research is being shared.

Essentially the above simply declares that this study is interested in the dissemination of design-oriented research; another way of saying research that is both into and through design.

This conflation constructively positions the subject of the research and the process for investigating it as both within the domain of design—blurring any artificial distinction between theory and practice. In defending a research-through-designing project as also researching-into-design, the individual project asserts a dialectical engagement that challenges the unproductive separation that allows the process of designing to be seen as distinct from the discourse about design. This is significant because it begins to assert the currency of what the research can offer.

The underlying ambition behind this study is to address the suspicion that discredits the potential contribution of research-through-designing with respect to knowledge building. The study seeks to counter the claim that the situated nature of designing presents little that is relevant and thus transferable to the wider community of practice. By investigating how we might further share the design knowing that comes from design-oriented research, I hope to further establish legitimacy and

enhance the agency of the research projects themselves. The research study presented here specifically responds to the challenge to find adequate, or at the least less inadequate, ways to translate and communicate the knowing that comes from designing. The proposition—to expressly focus on the role of dissemination and to reconsider strategies for how we approach the act of sharing design knowing with others.

Currently, the idiosyncratic and promotion-led dissemination vehicles for sharing design project-based work tend to highlight professional success over academic criticality. This celebration of form in turn directly defines the practice communities' notions of innovation and indirectly undermines the broader academic communities perception of design as being concerned with anything other than form and function. The design practice community must assert how design-oriented research can contribute to, confirm and contest the research into design that the design philosophers, historians and sociologists posit. Practice-led research needs to affirm how it enables knowledge creation, to prevent design and other creative fields from being marginalized with respect to how creative practice research is referenced by scholars and framed within education. It is important that we not just confer legitimacy onto design-oriented research, but that we recognize that the practice of designing must contribute to our understanding of design. Distinct from research *about* design, knowledge *of* designing has an important contribution to make—not just for the education of future design practitioners, but also for the professional practice of design; and so audiences for design can begin to comprehend the role design can play in cultural, political and economic terms.

I propose to address the contribution of design-oriented research by focusing on the issues that particularly pertain to dissemination. The main legitimacy issue is the question of transferability and the agency of design-oriented research would be significantly enhanced if the question of relevance for the research audience were addressed—essentially the concerns that surround legitimacy, agency and design knowing are interwoven and interdependent.

Research intent and design knowing

In Frayling's terms the separation between research *into* and research *through* design potentially creates a counter-productive distinction between the theoretical knowing about design and the practical knowing of designing. My discomfort with this implication is that if research is, in part, evaluated for its transferability, then the abstract theoretical claims of research into design may often be privileged over the more limited situated knowing associated with researching through designing. The term design-oriented research allows us to first and foremost claim that the intent behind the research is to contribute to knowledge building (even if that is not quite the right term) and secondly to acknowledge that this research will be done through the process of designing. This goes some way towards addressing issues of intent, because in some quarters the argument is that the purchase of research undertaken by the design practitioner is limited in application due to its primary objective to improve one's own practice or immediate practice community. More importantly, we need to address the more prevalent claim that design practice is predicated on a situation specific engagement and is therefore not well placed to offer insights or knowing that are of direct relevance or application to another unique situation. We need to directly negotiate the issue of transferability before we can step forward and consider relevance.

Legitimacy and transferability

First up we have to take into account the debate that surrounds how something as esoteric and subjective as design knowing can be formally transferred, disseminated. Then we can consider, with respect to situated practice-led research, what is worth disseminating.

To generalize, there are at this juncture two basic positions on how design-led research can be accessed. There are those who stand by the legitimacy of the designed object itself as the primary research outcome and those who declare that the artifact alone cannot disclose all that the research promotes. The artifact camp asserts the appropriateness of the embodied knowing 'speaking' through the artifact, while the exegesis camp positions the significance of a written text and/or working drawings to give the audience access to the process undertaken. At the risk of sounding overly simplistic toward these positions, that are of course more complex than summarized above, I am interested in the ground between the two camps. I perceive that the interpretative subjectivity of the artifacts presents an unpredictable, but creatively and intellectually engaging form for presenting research knowing, but I essentially see that the design process (not the artifact) plays the most substantive role within the research project. For me the design knowing that comes from practitioner-research constructively inhabits the space between theorizing and doing, and for this reason I believe it is counter-productive to draw too sharp a distinction between the written exegesis and the designed artifact. What I find more compelling to consider is the characteristics of the content generated by design-led research and how this can be framed as transferable, reusable knowledge.

The practice of design is by nature a situated activity and as such does not lend itself to generalized theories, pure abstractions or verifiable facts. But even if design research recognizes that it would be antithetical to the domain of design to promote repetition over invention, there does need to be some accounting for what knowing practice-led research can share with others. Although many scholars assert the transformative agency of the personal theories that come from practice [Jarvis], I am more interested in the call for practitioners to prepare accounts of their experience that, when shared, invite more than just a critique of that specific situation [Mason]. It would require another paper to get into the ways situated knowing might operate, but whether you accept Lefebvre's dialectical approach that the general is woven within the particular [in Highmore], or Lave and Wenger's claim of concrete observations, or Serres [in Carter] perception of a knowing that irregularly pulsates from the local to the global, it does seem possible to talk about the contribution localized knowing might present.

What I am proposing is not an instrumental compliance driven conception of knowledge management, but more a productive consideration for how the act of dissemination might enable knowledge creation. The research study was not simply looking to conceive of a creative strategy for disseminating practice-led research, is predicated on a creative take on what knowledge is and can be and foregrounds design's relationship to imagination, invention and innovation. This study suggests that the dissemination material only introduces the proposition the research elicits—the real potential that comes from sharing design knowing will be in the recursive, discursive process of negotiating and renegotiating what the report means for individual practitioners and the community of practice.

Agency and relevance

With consideration for the act of dissemination, I have always understood that there are two parts to this equation: first, from the perspective of how a research project's contribution advances the

researcher's practice and second, ways to account for this knowing to the community of practice so that they can recognize how this research might be applicable to their own situation. But my main concern is that the act of dissemination will be elevated and more productive for all parties if there is *active* engagement by both the researcher-practitioner and the research audience. To emphasize the significance of engagement, Waters modifies the question "if a tree falls in the forest and no one is around, does it make a sound?" into "Is it a contribution to scholarship if no one reads it". But I am not just concerned with whether the scholarship is 'read'. My attempt to make the stage of dissemination an active moment for both researcher and audience; to promote the valuable learning that can be enacted by reflexively engaging with the process.

Dilnot writes about how practice can become knowledge-productive if we follow a two-step process of enactment (the practice) with a follow-up step of critical reflection (the analysis). He refers to this second stage as an analytical translation of enacted practice into knowledge. My criticism of most accounts of practitioner research is that the second stage overstates the relevance of the design knowing that has surfaced with respect to their particular situation and, for reasons already acknowledged, skirt around abstracting that experience. Reflecting upon the personal design knowing is definitely productive for the researcher. What needs more consideration is how the so-called analytic step can be framed to be relevant and beneficial for the audience. Might it be more relevant for the dissemination phase to be speculative and divergent, than convergent and directive? to present not just experience as theory, but to promote the knowing in a way that invites reflection upon its possible agency in future situations.

Mason suggests that we can address the tension between the sciences notions of validation and subjective accounts of personal experience by researchers preparing reports that promote potential. Perhaps in the realm of design it would not be useful to simply seek to pin down or even represent the designers tacit knowing as explicit knowledge. Perhaps it is more beneficial to seek to translate a designer's situated engagement with research with the intent that the future-looking report resonates with other practitioners' experience.

Designing and resonance

With respect for disseminating research, it seems that consideration for preparing material that resonates with the audience can be contemplated not just with respect to the content, but also through the form of the dissemination. Might dissemination strategies further resonate with practitioners if the form adopted for presenting the research spoke to the visual literacy of design practitioners? What new knowing would be disclosed by using strategies for creating and transmitting design research that are sympathetic to the nature of designing and design knowing?

In designing visual accounts of practice-based research, might we develop a dissemination model that facilitates a discursive designerly process for reporting design knowing—a model that discloses the back talk behind the design process while communicating through the literacy of the design discipline. The intent being that if the process of engaging with this material mirrors a designers engagement with their practice, the experience would be more likely to resonate with the researcher-practitioners and, as importantly, the research audience.

Dilnot references how although the sciences might number the world and the humanities might narrate it, what they have in common is a predisposition to describe it. If the distinction becomes that design is

less concerned with describing 'what is' and more interested in proposing 'what if', what should the intention behind sharing design knowing be evaluated by? Taking all these concerns one step further—if the realm of design is about possibilities, can the objective of sharing design knowledge be framed not by describing what happened but by enabling possibilities in another's practice? Might this take on the role of dissemination permit design-oriented research to assert a unique, but productive, perspective on how the act of sharing research can be implicitly connected to negotiating and conferring the agency of the research itself?

Part II: Promoting Potential from Design-oriented Research

The Contribution of Design in Preparing Dissemination Material

The research that informs this paper was framed by a design-led exploration of how designers could disseminate practice-based research in a way that maximizes the agency of the research for the communities of practice. My proposition is that designed dissemination artifacts promote potential ways that designing, specifically designing communication, can present alternative, more productive strategies for disseminating design-led projects. This proposition has been informed by a design-led research project that questioned whether the strategies we use for creating and transmitting design research can be sympathetic to the nature of designing and design knowing. As the practitioner-researcher behind the project, I defined a research project, around my expertise as a communication design, where a series of design and writing dissemination projects allowed me to enact, reflect upon and analyze this proposition.

The broader research investigated, through designing, ways to translate the situated and often tacit design knowing that comes from research-through-designing, into content that might inform and resonate the practice community. Since this research sought to align the research methodology with the reporting methodology, the dissemination material was positioned as a communication design project that was a natural extension of the research project itself. The designed, visual material intended to play a significant role in both unpacking and communicating the design knowing the project discloses.

The initial design exercises sought to consider the potential of acknowledging the sophisticated visual literacy of the design communities. The intent questioning whether relevance might be established by drawing on the refined design expertise of the researcher and working with the reality that most practitioners would confess to being more influenced in an image-based design book than a written text. To this end, the early exercises explored the possibilities visual accounts presented, by attending to how the artifacts and support material were edited, annotated and framed. These early exercises explored a range of visual communication strategies including: the documentation of artifacts with research questions, explicating research outcomes by visually highlighting details within artifacts and visualizing project maps to communicate the design process undertaken.

Before designing, I had hypothetically thought the process would require myself, the researcher, to be concise in how I presented key findings of my research to others. Additionally I framed visual literacy as the primary motivation for the practitioner-researcher who I believed would prefer to design than write their dissemination material. I further argued that the audience, as well, would elect to engage with a visual essay over a case study description. I had come to this position through essentially

engaging with design research through the practice of writing various research papers. But my practice-led engagement with design-oriented research served to illuminate the complexity of the situation.

As a consequence of this research through designing it became clear that even though the process of preparing designed material for dissemination had successfully aligned with my practice expertise and spoke through the literacy of the practice community, there were outstanding issues that needed to be addressed. These exercises may have almost effortlessly illuminated some of the knowing that would not have been so accessible from presentation of the lone artifact. Formal consideration for how to visually communicate the design knowing within the research projects had enabled me to succinctly communicate a distilled account of what was substantive about the research. Still, I recognized that in comparison to the challenges and rewards of writing, the somewhat reductive intent of the exercise had limited the opportunity for new insights to be disclosed to myself, the practitioner-researcher. In addition, the processes and artifacts described and documented had failed to sufficiently address the issue of relevance and what others were to take from examining the dissemination material.

To go beyond dissemination as a simple compliance measure I saw it as imperative to develop a strategy that would creatively engage the research community and the audience for the research. Committed to enhancing the researcher's critical reflection and, more specifically, to address the issue of transferability and relevance with respect to the research audience, I set out to consider dissemination this perspective.

Although I recognized how critically productive writing had been in disclosing new ways of understanding my practice, with respect to collective experiences of design, the problem was that I was equally dissatisfied with my experience of writing papers. I found the logical, rational linear structure of writing a defense of my position not only a skill I felt poorly equipped for, but also incongruous to my practice as a designer. My experience of the domain of design is that it is more about inscribing possible structures than revealing inherent ones [Newton]; leading me to question whether the problem wasn't with the design of the dissemination, but with what I was electing to communicate.

All of the initial design exercises considered the task of dissemination essentially through the lens of the situated research project being communicated. Similarly, early papers I had written also basically operated as case studies, accounting for the design research project undertaken. But out of frustration at my overly specific and descriptive style of writing, I next attempted to prepare a propositional paper that sat somewhere between the particular and the abstract. Resisting the urge to generalize from or exhaustively relay my experience, I decided to write in a style that asked questions of the reader. This paper was more interested in asking questions than presenting definitive conclusions and, as such, introduced me to an alternative way to engage audiences with situated practice-led research projects.

What I find interesting about this dialectical engagement with research through both designing and writing is that it invited me to conflate doing with reflecting, experiencing with abstracting. This point is significant because I am proposing here that the dissemination of practice-led research will benefit from us collapsing the divisive distinctions between making and theorizing. The making of the exercises constructively proposed not just the next course of action but also disclosed an alternative set of values to the act of designing visual accounts. Grounded in practice, my reflections so far seemed to dance toward a localized observation that visuality was not the defining value of the dissemination artifacts as I had first contested. Although the designed outcome had gone a long way

to visually communicating the research projects, what the design exercises had now revealed was that the purchase of designed dissemination material lay in the discursive process of designing.

The Process of Designing and the Act of Reception

In critically reflecting upon the knowing the designed dissemination artifacts generated and communicated, it became clear that the creative process of deploying design was more distinctly productive than the merits I had previously ascribed to the visual form of the dissemination material. More constructive than the form of the dissemination was how the act of designing informed the process of identifying, translating and communicating the salient points of the research. Even though I attempted various kinds of communication strategies, from documentary to expository to rhetorical, it was the discursive process of others critiquing and interpreting the work in progress that clearly began to announce the significant potential of designing dissemination. Given that I already accepted that the agency of design lies in the process of designing not in the designed object itself [Newton], then perhaps I should have realized earlier that the contribution that comes from designed dissemination material would rest with designing communication strategies that reflect upon how we share research with others. My experience of designing dissemination material confirmed Mason's assertion that establishing the relevance is of primary importance to the act of reporting research.

What the practice-led inquiry revealed was that any new insights that came to myself, the researcher, came from the critique process of designing it with my colleagues as it did from considering the content for communication. In concordance with this, the inquiry also revealed something about the way other designers chose to engage with the material. In presenting the material to fellow designers it became clear that they did not even feel compelled to feign interest in further understanding the experience the research presented to me. But their expertise in speculating about the possibilities posited by the material, engaged the designers to very naturally reflect upon the implications the charts or images proposed in relation to their own practice.

Designing was now understood as central to my argument. The series of projects so far had constructively signaled the next actionable steps in the larger research study and I proposed to explore further the reflexive process of designing dissemination artifacts and the discursive process of engaging with the work-in-progress and the reception of the completed documentation. This second set of design exercises intentionally set out to consider how the discursive process of designing could specifically address the two main concerns of transferability and relevance.

The first project addressed transferability and the issue of research project artifacts in relation to considering how localized knowledge from a very particular situation could be understood as transferable within a formal research context. I set out to design a visual essay for a journal published by the Australian Graphic Design Association, a professional body, but where the journal essays are peer-reviewed by academics. As previously mentioned, I advocate that the design process is more than just an appropriate research strategy, but perceive that the agency of design lies in the process more than the artifact. My suspicion of the camp who support the project artifact as an embodiment of the knowing the research offers is that the lone finished artifact will often fail to promote the contribution the process of designing plays within the research. But in my attempt to visualize the processes I had worked on across a range of design projects, I became aware that the professional audience would seek to critique and review the processes adopted in relation to the project artifacts. I

came up with a rhetorical device where I layered the artifacts as photographs behind the process maps—visually negotiating the situated experience of the unique projects with the potentially collective relevance of the more generalized process maps. In this way, the visual essay designed with extended captions sought to frame the rationale behind the research and highlight the salient characteristics of the process adopted in designing the artifacts. The communication design strategy respected the contribution the situation-specific artifacts could play in foregrounding the transferable knowing disclosed by unpacking the project experience through visualizations and explications of the diversity of design processes adopted.

The second project I undertook was to design material that sought to actively engage the audience—not as a passive bystander, but as a participant in the dialogue the research promotes. In accepting Burnett’s claim that the passive viewer is simply a myth, I foresaw that visually conceived dissemination artifacts can operate at the nexus between designing, viewing and critical reflection. Burnett references the constant interplay between events, their recounting, and images—casting subjectivity and the open interpretation of designed dissemination material as a strength. It was my intent to develop design material that invited ambiguity, in turn proposing a communication strategy that potentially addressed engagement, relevance and resonance. Having witnessed designers’ future-oriented ability to speculate on the possibilities research presents, I was encouraged to design material that drew on this skill. To specifically engage with the issue of relevance, I designed abstract maps that referred generally to the different attributes that various communities ascribe to the practice of design. The launch-stage visualizations were prepared at the beginning of a research project, designed to open up rather than shut down potential readings—therefore inviting the research stakeholders to contribute to the conversation. The intent behind the visualizations was to lead the research audience into the images, encouraging them to ask what this means for them. In this series I had two colleagues closely critiquing and contributing to the maps from the outset. The maps were intentionally integrated into the process of defining the research project itself and the interplay between the project proposal and research maps allowed them to iteratively inform each other. What became of significance with respect to this project was the accessibility and familiarity with which people could engage with and offer critical feedback to the visual maps—in comparison to the more time-consuming act of critiquing the sequentially structured written document. This served to posit that one reason designers might respond well to designed dissemination material is that the discursive, iterative, poetic process of engagement associated with interpreting images has significant parallels to the act of designing.

Conclusion

The design-oriented research outlined in this conversation is what has allowed me to confidently assert that alternative dissemination models can and should accommodate the realm of design as one of possibilities. It now seems that the complementary nature of reflecting through a visual design process can facilitate a closer reading of one’s research experience. It also became apparent that the visual accounts success or failure was based on the clarity of thought behind the documentation and how rigorously we critiqued the work in relation to the communication objective. But in saying this, significant learning on my part came from other alternative interpretations of the open-ended visual texts. Once I put aside rationalist conventions and intentionally investigated transmission models that not just enabled, but encouraged, multiple interpretations of the designed dissemination, the process

became more relevant and resourceful. For in promoting potential and resonance over validation and verification, the audience could become active participants in reading and interpreting the research. Therefore it seems plausible that a designerly orientation to sharing our research projects might disclose design knowing that could be shut out by attempting to access this knowledge through inherently different paradigms of knowledge creation. If we accept that some design knowing cannot be made explicit, that some knowing appears ungraspable—might we acknowledge the application of the research by proposing the potential, rather than locking in the repeatable?

This paper argues that the insight that comes from the act of sharing knowledge might be heightened for both researchers and practitioners if the nature of dissemination reflects the nature of designing. With design researchers already having the skills required to deploy design to convey their experience, it seems relevant to consider whether the ambiguity inherent in visual signification might enable a discursive, sustaining engagement with knowledge creation and dissemination. That as designers we might be able to claim, what Rose [in Dilnot] refers to as a space between theoretical and practical reason, between positing and posited. Because, as a designer, I'm content to leave descriptions of the world to the humanities and the sciences so I can spend more time investigating the possibilities of what the world can become.

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