

# Inquiry and Research in Design: A Contribution to the Mapping of the Discipline's Development.

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This paper distinguishes between inquiry and research as activities increasingly important to the design community but often confused. Based on a review of material published in the journal *Design Issues* during the past twenty years, it describes an emerging culture of inquiry that compliments the research culture of design now well established within the global design community. The author argues that both are essential for the development of a diverse, relevant and respected design presence in the contemporary world.

Research is an activity directed to the solution of specific problems or the refinement of data and knowledge in discrete identifiable areas of concern. Inquiry deals with the ongoing conversation about principles and purposes informing design action. While inextricably linked to research, this paper suggests inquiry constitutes a separate kind of activity directed not at specific or contingent design problems but general questions of motivation and purpose.

The discussion of inquiry is developed through a review of different themes in design discourse. Over the course of the past twenty years inquiry has coalesced around a set of themes:

- Sustainability (including the continued viability of social as well as natural systems).
- Identity (including considerations of gender, ethnic, class, communal and individual identity).
- Product experience (how people perceive and interact with products).
- Users (how designers understand and conceptualize users).
- Local design culture (how local design cultures interact with global design theories, models and practices).
- Alternate models of design practice (economic, social and environmental models of practice).
- Disciplinary models of knowledge (what is it designers know).

At first glance this list will hardly seem novel to anyone who has followed the development of design discourse. In the context of this paper, it is noteworthy that while considerations of these themes has suggested fruitful new avenues for research and revealed anachronistic aspects of modernist design theory and doctrine, they have resisted anything approaching closure or resolution. That is, the design community has reached no new consensus concerning the formulation and adoption of new models, strategies and evaluative criteria uniformly applicable.

This paper concludes that nurturing a culture of inquiry is important to the design community for several reasons:

- 1** Inquiry understood as the thoughtful interrogation of design practice is essential to maintaining the relevance and vitality of practice.
- 2** Inquiry promotes the refinement and dissemination of research strategies.
- 3** Inquiry keeps alive our shared passion for design that defines and unites us as an intellectual community.
- 4** Inquiry establishes the claim and authority of this intellectual community to a voice in significant societal discussions. An authority based not on technical expertise but on an ability to connect technical expertise with larger questions of purpose, values and the relationship between means and ends.

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Conference announcements promoting Futureground explicitly positioned this conference within the framework of an evolving field of studies and identified this gathering as the latest in a series of conferences devoted to - in the words of the Futureground program statement – “The current work of the design research community.” One of the auxiliary themes identified as part of our program this week is “mapping the discipline’s development” and my paper is offered as a contribution to this theme. It is based on a particular understanding of design and my personal experience as one of the editors of the journal Design Issues.

Design, as I employ the term in this paper, is not a product of modernity, although particular forms of design and design practice (industrial design, for example) may be inextricably linked with the modern experience. Instead, design is a fundamental human activity. Design is the coordination of material resources and available skills with human purposes and needs. In this way of conceptualizing design, it constitutes the activation of human values in specific situations to achieve desired ends.

Design Issues recently celebrated its twentieth anniversary.<sup>1</sup> One way the journal can be seen is as a mirror of design discourse in the sense that it reflects the concerns of the contributors. A simple mapping of the table of contents over the past twenty years indicates fairly accurately the geographical and thematic range of manuscripts submitted.

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<sup>1</sup> I have been involved with Design Issues for seventeen of those twenty years; what follows are my observations and my reflections alone. Over the past two decades a number of people have contributed their skill, knowledge and passion to editing Design Issues and each of them has their own perspective on the journal and its relationship to design discourse.

If there have been relatively few articles devoted to design developments in Africa or South America, for example, this reflects the paucity of manuscripts submitted treating these subjects.<sup>2</sup> Using what you the design community have published in Design Issues, I want to make a distinction between inquiry and research as activities and describe an emerging culture of inquiry that compliments the research culture of design now well established within the global design community. In the schema I want to present here, *research* is an activity directed to the solution of specific problems, the development of particular methodologies or the refinement of data and knowledge in discrete, identifiable areas of concerns. *Inquiry* is the term I want to use to describe the on-going conversation about principles and purposes informing design action. While inquiry is inextricably linked to the activity of research, I want to suggest that inquiry constitutes a separate kind of activity directed not at specific or contingent design problems but one that addresses broad questions of motivations and purpose and promotes conversation within our global community about issues of mutual concern.

The need to recognize the importance of research for the design community and to refine our understanding of the activity of research is by now well established. In 1999, for example, Design Issues published a special issue (volume 15 no. 2) devoted to design research and guest edited by Alain Findeli. In his introduction Findeli reminded readers that the focus of the essays brought together in that issue was on research methodology rather than design methodology.<sup>3</sup> What constitutes design research, who is qualified to conduct it, how is research to be positioned between the worlds of professional practice and design education – is research a bridge between the profession and the academy or the chasm that separates them – what do terms like disciplinary, interdisciplinary and transdisciplinary mean for an activity as complex and multi-faceted as design, what does research generate – new products, new analytical tools and methods, new forms of

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<sup>2</sup> Thankfully, this is finally beginning to change; Volume 20 no. 2 (Spring 2004) was a special issue, guest edited by Marian Sauthoff (University of Pretoria) and Ian Sutherland (Durban Institute of Technology) devoted to design in South Africa.

understanding and bodies of knowledge? These are questions that the design community has wrestled with in recent years in various venues: conferences like Futureground, list serves such as the PhD. list serve established after the 1998 Ohio Conference on doctoral education, and in the pages of journals like Design Issues. “Well established” does not mean that a consensus exists on the answers to these questions. In the context of this paper, well established means various conceptual schemes<sup>4</sup> have been advanced to organize research activities and the discussion of research is lively and on-going. Indeed it is the lively and on-going nature of design discourse as we encounter it today that prompts me to suggest that we need a concept of inquiry to complement and clarify the kinds of discussions we are all engaged with.

Inquiry, as I am deploying the term here, stands for the notions – the assumptions, concerns and purposes – that initiate and guide research campaigns. I am not speaking here of the project briefs that define the direction, pace and product of research campaigns but of the reasons we accept project briefs: the general concerns that specific research campaigns contribute to advancing. Inquiry in this sense is generative, it comes before and reaches fruition through research and practice rather than following reflectively after the design process has concluded.<sup>5</sup> In a historical moment that demonstrates a high degree of consensus about what the critical values and common concerns are or in a situation in which there are a limited number of frankly antagonistic positions attention tends to be focused on rhetorical strategies for disseminating or defending a specific world view. In recent decades, however, the development of design as field has taken the form of the elaboration of diverse theoretical approaches. The old modernist teleological narrative of progress, that is, of the steady improvement in modes of calculation, techniques for fabrication, and universally valid frameworks for integration and explanation, has been replaced by a pluralist culture in which multiple

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<sup>3</sup> Alain Findeli, “Introduction. Special Issue: Design Research,” Design Issues 15, no.2 (Summer 1999): 1.

<sup>4</sup> For more on this see, Nigel Cross, “Design Research: A Disciplined Conversation,” Design Issues 15, no.2 (Summer 1999): 5-10.

<sup>5</sup> The point of departure for this discussion of inquiry as a generative force is John Dewey’s Logic: The Theory of Inquiry. (Holt, Rinehart and Winston, New York: 1938).

narratives, sets of questions and constellations of ideas and interpretive frameworks co-exist. A review of the program for this conference suggests to me that diversity is one of the characteristics of our contemporary moment and I accept diversity as a sign of vitality not weakness or confusion. I think that diversity is one of the hallmarks of a pluralist culture.

Pluralism, like research and inquiry, is a term that calls for some clarification since it is charged with various meanings these days. I do not use the term as a synonym for facile relativism (anything goes) or tolerance (I don't believe that but I respect your right to believe that). Pluralism is not the acceptance of anything simply because, it can be argued, everything is the result of power relationships and market forces. Rather, I understand pluralism as the commitment to engagement with diverse perspectives, a commitment that comes with the openness to adjusting or refining one's own position in light of insights gained through the thoughtful consideration of others. My co-editors at *Design Issues*, Richard Buchanan and Victor Margolin have articulated this concept of pluralism in the following way.

Pluralism is the principled cultivation of a sustained conversation among individuals with widely differing perspectives on the natural and human-made world. Pluralism keeps alive the ongoing search for truth and understanding by focusing inquiry on common problems encountered in experience – in this case, the experience of the human-made – rather than on the technical refinement, fine points, and stylistic polish of single theory.<sup>6</sup>

Having just made the case for pluralism and diversity, however, it is necessary to acknowledge the cogency of the challenging observation of Alberto Perez-Gomez that appeared several years ago in *Design Issues*:

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<sup>6</sup> Victor Margolin and Richard Buchanan, eds, *The Idea of Design*. (MIT Press, Cambridge, MA: 1995): xii.

It is not enough to invoke pluralism and diversity as an excuse for fragmented and partial answers.<sup>7</sup>

Indeed not, for I want to argue that diversity does not preclude coherence and pluralism does not lead inevitably to confusion. To achieve more than a declaration of positions, to sustain a principled and fruitful conversation requires some attention to the nature of conversation itself. Here is where shifting the focus from the definition of specific research methods and presentation of particular research results to the types of inquiries that animate and drive research is valuable. I am using Design Issues as my lens for focusing this part of the discussion and while I acknowledge that restricting my discussion to material published in Design Issues is arbitrary and limiting I still think the exercise is useful. Inquiry as it has emerged in the pages of the journal over the course of the last two decades has coalesced or crystallized around a set of themes.

- **Sustainability:** Discussions of this theme address the necessity to recognize the full complex impact of human actions on the environment and to appreciate the design community's past complicity and future contribution to managing resources and environments in a responsible and sustainable manner. I include here concerns for the continued viability of social as well as natural systems and communities.
- **Identity:** Contributors to Design Issues have consistently taken up the discussion of design's role in the construction, concealment or revealing of identity considered in terms of gender, ethnic, class, communal and individual manifestations of identity.
- **Products:** How, authors are asking, do people perceive and interact with the products that surround them.

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<sup>7</sup> Alberto Perez-Gomez "Hermeneutics as Discourse in Design," Design Issues 15. no.2 (Summer 1999): 71-72.

- **Users:** How do designers conceptualize and assess users of their products and services.
- **Globalization:** The term globalization may be crude and increasingly inadequate but I employ it here to identify the host of issues that surrounds the interaction of local cultures with global design practices and the patterns of movement generated by the circulation of theories, models, techniques and experiences.
- **Design Practice:** Discussions of design practice have been expanded and enriched by the description of environmental and social models of practice that now provide alternatives to the economic models of the design professions place within markets.
- **Disciplinary Knowledge:** Questions concerning the existence and nature of knowledge specific to the domain of design have been raised by various contributors. What is it designers know and in what forms and formats is discipline-specific knowledge preserved and passed on to others?

At first glance this list will hardly seem novel to anyone who has followed the development of design discourse in the pages of Design Issues or conferences and events sponsored by the Design Research Society. In the context of this paper it is noteworthy that while considerations of these themes has suggested fruitful new avenues for research, they have resisted anything approaching closure or resolution. The design community has reached no new consensus concerning the formulation of new models, strategies and evaluative criteria uniformly applicable. One thing that comes through in a review of this list is the potential for these themes to connect us to other domains of knowledge and communities of practice engaged - as we are - in considering them. Another thing that strikes one is that these themes provide opportunities to examine and discuss the value systems that shape design activity. A third observation about discussions that coalesce around the themes on this list: contributors to Design Issues have found ways to advance the discussion of these themes. Repeatedly, articles identify the obstacles to inquiry.

I have already referred to one obstacle: the teleological nature of modernist design doctrine with its quest for a universally valid approach to design applicable in all situations and at all scales from the spoon to the city. Something of what I mean by this modernist design doctrine is captured, for example, in Walter Gropius's 1926 statement of Bauhaus principles:

The creation of standard types for all practical commodities of everyday use is a social necessity. On the whole, the necessities of life are the same for the majority of people. The home and its furnishings are mass consumer goods, and their design is more a matter of reason than a matter of passion.<sup>8</sup>

Contributors to Design Issues have addressed this in several different ways. One way to open up the field for fresh inquiry is to demonstrate the inadequacy of previous assumptions and approaches. At issue is not the truthfulness or falsehood of positions but rather the suggestion that the way we once thought about an issue is now revealed to be limited in scope and inadequate to the task of connecting disparate types of data and experiences in meaningful ways. A second way to address the heritage and legacy of the modernist design tradition is to refine that legacy, to demonstrate that more is embedded within this tradition than we might be familiar with. It may appear contradictory for me to argue that on one hand we need to reject the legacy of modernist design discourse as anachronistic while on the other hand suggesting that we need to refine not reject this intellectual tradition. But what we are considering here is not reducible to an either-or situation; it is not about determining the single best way to proceed. It is about developing a legible portrait of complexity. What is needed is neither a celebratory narrative of progress nor the narrative of power that superceded it in recent design criticism. Rather, we need a narrative of conversation, that is, a description of continuous efforts to engage, refine and amplify our understanding of what we do.

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<sup>8</sup> Walter Gropius, "Principles of Bauhaus Production (1926)" in: Ulrich Conrads, ed., Programs and Manifestoes on 20<sup>th</sup> – Century Architecture (MIT Press: 1970): 96.



Contributors to Design Issues have consistently made very ambitious claims for design. Whether we are talking about design history, presentations of current design methods or the development of theoretical models of design, readers will discern a consistent argument that designers have – and should continue to – expand their role in the modern world. If designers were once thought of as involved primarily in giving physical form to objects, they are now routinely described as involve in developing or configuring entire systems and networks that shape personal experience and social patterns in significant ways. In one of the most developed discussions of this particular theme, Tony Golsby-Smith argued the case for an expanded vision of design’s ability to configure our worlds.<sup>9</sup> He argued that designers can do more than solve given problems of form and organization; designers can discover new problems and possibilities. Designers can do this because they combine within a single practice the skills of analysis, reflection and action. It is this intellectual profile of design as a domain that integrates analysis, reflection and action that distinguishes design from the abstractions of philosophy and the instrumentality of production-oriented trades.

Nurturing a culture of inquiry within the design community is important for several reasons.

- Inquiry understood as the thoughtful interrogation of design practice is essential to maintaining the vitality of practice. Inquiry involves asking why we are doing what we are doing and why are we doing what we are doing in the way we are doing it. Inquiry is essential if we are to prevent design from becoming merely the instrumentality of a pervasive and destructive process of the commodification of culture and the impoverishment of experience.
- Inquiry promotes the refinement and dissemination of research strategies by identifying new contexts and situations in which existing research strategies might be applicable. Inquiry prompts us to speculate that insights gained in one area of

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<sup>9</sup> Tony Golsby-Smith, “Fourth Order Design: A Practical Perspective,” Design Issues Vol. 12 no. 1 (Spring 1996): 5-25.

work might profitably be applied in another or, conversely, to recognize the limitations of particular research methodologies.

- Inquiry keeps alive our shared passion for design, a passion that defines and unites us as an intellectual community. Why are we here in Melbourne? What is happening here that could not happen on-line or in the pages of a journal like Design Issues?
- Inquiry establishes our claim and authority as an intellectual community to a voice in significant societal discussions. Ultimately, the authority of design ought to be based not on technical expertise but on the design community's ability to connect technical expertise with larger questions of purpose, values and the relationships between means and ends.

This last point is critical. If the design community is to move towards what people like Tony Golsby-Smith, Richard Buchanan and other have described as fourth order design, we will do so not on the basis of technical competence alone. We will do so because we are able to address fundamental questions of purpose and value not with metaphysical abstractions but with the kinds of skills, experiences and wisdom that enable and empower communities to configure their environments – both the human-made and the natural environments – in ways that enrich and sustain the lives of all of us.