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An Examination of Scholarly Critique in DRS Publications and Its Role as Catalyst for Community Building

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The design research community has been interested in its identity as an intellectual community for some time, and, as with design itself, critique is central to good scholarship. Building on recent citation analyses in the field, in this paper we examine two cases of critique in design research scholarship. We aim to contribute to the theory of scholarly critique by providing a richer picture of critical citations than has previously been available. In addition, we identify the need for a crucial methodological development in the field; namely, design researchers need a way to examine and assess critical citations *from within*. Analytical (citation) frameworks that have been imported from other fields are limited in what they can tell us about the nature and quality of critical citations in the design research community. We argue for the DRS community to examine and reflect on its use of scholarly critique.

scholarly critique; community building; critical citations; citation analysis

1 On Intellectual Communities and Critique

"A group can be a society simply by virtue of belonging to a common association. This, however, does not guarantee that the members share anything other than their membership in the association. Societies such as the DRS organize conferences, give prizes, disseminate articles through a journal, and establish standards of achievement without having to deal with how the thematic substance of a scholar's research relates to a larger field. Likewise, we can speak of a design research network but there is no guarantee that those in the network will produce any valuable discourse" (Margolin, 2016, p. 6).

Victor Margolin has critiqued the design research community and, in particular, the Design Research Society (DRS). Indeed, a grouping of people does not necessarily form a community. Tönnies ([1887] 2001) has stressed the value of a community as distinct from a society. A community includes members who have a common goal and shared values and who achieve something together. In a

society, groups are *instruments* for people to achieve their distinct and sometimes contradictory goals. Community building is challenging, and it requires understanding (and attempting to influence) a number of dynamic elements.

We propose *scholarly critique* as one such parameter for an academic community. In this paper we are interested in exploring how the presence or absence of scholarly critique plays a role in the intellectual growth of the design research community.

Critique is a crucial aspect of community life. In his famous text, *Ethics* (1904), John Dewey demonstrates the necessity of critiquing human affairs (using social philosophy) to nurture a community. In addition, Richard Sennett has argued that an erosion of social mores originally designed to maintain and cultivate spaces for critical, civic engagement, has resulted in a decline in public life (1978). He elaborates this line of thinking in his more recent book, *Together* (2012), exposing how everyday diplomacy paradoxically hinders group discussion and prevents criticism, both of which are crucial activities for cooperation and community-building.

Critique is also central to designing. Designers regularly critique their work, and many design schools include juried critiques as core components of the design curriculum (Oh, Y., Ishizaki, S., Gross, M. D., & Do, E. Y-L., 2013; Dannels, D. P., & Martin, K. N., 2008; Uluoğlu, B., 2000). In the design research community, as in other intellectual communities, scholarly critique also plays a role in knowledge production (Jacques, 1992; Lakatos & Musgrave, 1970).

Considering the potential importance of critique for building a research community and given the centrality of critique to the design field, we were interested in examining an outcome of our previous citation analysis of DRS publications (Beck & Chiapello, 2016). In an examination of two years' worth of DRS conference proceedings, we found only four instances of scholars citing Donald Schön in order to criticize his work. Schön is one of the most highly cited scholars in the design field. His work thus appears to be highly influential, and yet critical citations, which, following Harwood (2009), we refer to as "engaging citations" were rare. Is this scarcity a cause for concern? How is a key author like Schön criticized? Where should we go from here?

2   Studying Citations in DRS Conference Proceedings

In order to assess the role of critique in the DRS community, we gathered proceedings from the last four DRS conferences (2010, 2012, 2014, 2016). These papers can be seen as privileged sites for scholarly criticism. Margolin (2016) stresses the importance of publications in a research community in part because they can provide a comprehensive view of its accepted knowledge. At the launch of *Design Issues* in 1982, Margolin described the journal as a step towards establishing "new forums for research" where critique could thrive. "We characterized the journal as a forum for design history, theory, **and criticism**" (Margolin, 2016, p.3, our emphasis). Other forums include the *Design Journal*, which is the official publication of the European Academy of Design (EAD), and *Design Studies*, established in 1979 by the DRS. Conference proceedings augment these journal publications, thus forming a vast network of what can be seen as the scholarly writings of the academic field of design.

At the 50th anniversary DRS conference, we published the results of a qualitative citation analysis of all citations of Donald Schön's work in two years' worth of DRS conference proceedings (2012, 2014). In this paper, we build on this study in two ways: (1) we expand the corpus to include two additional years' of DRS conference proceedings (2010, 2016), and (2) we focus our analytical efforts on critical citations only. The former decision contributes to any validity claims we might make about our findings. The latter enriches our understanding of the role of scholarly critique in DRS conference proceedings, which are part of the intellectual output of the design field.

In our previous DRS publication, we examined 194 citations collected from 63 papers using an existing framework that distinguishes 11 different citation functions (Harwood, 2009, pp. 501-510). We found that most in-text citations of Schön's work serve one of two purposes: (1) crediting Schön for his ideas or concepts and (2) justifying their own research topics, arguments, methodologies, and

so forth. We found only *four* citations critiquing Schön's work. We were intrigued by this finding. Since critique is considered a crucial aspect of the design professions *and* the design discipline, we would have expected more scholars to be critical of Schön's work.

Moreover, we were surprised to find that all four critical citations come from the same paper: *Researching the One-on-one from a Learning and Teaching Perspective* (Wallis & Williams, 2012). This means that no other *referenced* critique of Schön's work appears in our first corpus. Working with the same corpus (plus two more sets of conference proceedings) we developed a stronger sense for how to distinguish between the different citation functions. When we analyzed four years' worth of DRS conference proceedings (2010, 2012, 2014, 2016) we found one additional paper critiquing Schön with in-text citations: *The Value of Stimulated Dissatisfaction* (Spencer & Hilton, 2010).

Thus, our findings in this study suggest that only two out of the 120 papers citing Schön published at the past four DRS conferences critique his work*.* This would seem to constitute a peculiar case of absence. Critique is central to designing, and it has been characterized as a crucial aspect of intellectual community life. Yet in four sets of DRS proceedings, critique of one of its most highly cited scholars is notably absent. The few critical citations become quite interesting. Siggelkow calls cases like these "talking pigs" (2007, p.20), which captures their surprising, unusual qualities.

3   Critical Citations are Complex and Nuanced

Citations have been widely studied in research communities, such as: information science, English for academic purposes, applied linguistics, and natural language processing. Scholars in these fields propose different rationales for studying citations. For example, some suggest that studying citations can give insight into the relationship *between* scholarly publications and, thus, the transfer and interplay of academic knowledge (Teufel, Siddharthan, & Tidhar, 2006, pp. 80-81). Jörg argues that citation counts "have matured towards a serious means of assessing impact of scholarship" (2008 p. 31). In our own previous work, we have argued that insight into citation function might tell us something about knowledge production in design research (Beck & Chiapello, 2016, p. 26-27; in press). Citations would thus appear to be complex and meaningful knowledge objects.

In some cases, citations perform the typical function of crediting sources for concepts or text. However, they may be *intended* as demonstrations of researcher fluency in a discourse or topic (Harwood, 2009). Similar to Ziman (1968), Harwood frames citers' *motivations* as multifaceted: there are many reasons to cite a given source and those reasons can be context-dependent.

Hyland has studied "the contextual variability of citations" in order to investigate "the [distinct] ways knowledge is typically negotiated and confirmed within different academic communities" (Hyland, 1999, p. 341). With regard to our previous findings (2016), we became curious about how scholars in the DRS community negotiate knowledge. More specifically, how do they critique and (potentially) engage with or build upon existing scholarship?

A challenge we face in studying critical citations is that, although existing citation frameworks (cf. Harwood, 2009; Small, 1982) distinguish critical citations from other kinds, they do not necessarily account for the complex nature of critique.

One reason for this could be a general deficit of critical citations in published scholarship. Howard White's (2004) summary of citation classification studies describes a thread of research on "negative" and "refutational" citations, which we refer to in this paper as critical citations. From the earliest study (Small, 1982) through more recent studies at the time (e.g., Vinkler, 1998), White summarizes a pattern of "low percentages of negative citations… [the] great majority of citations are thus confirmative" (2004, p. 101).

In addition to a possible overall lack of critical citations, White points out that it can be challenging to distinguish critical citations from other kinds. "The coding of `negativity' in some studies may have

conflated real attacks and refutations with mere assertion that the citee's work has not solved the problem the citer wants to address" (White, 2004, pp.101-102). We agree with the notion that coding critical citations is complicated and problematic. However, we disagree with White's distinguishing "real" negative citations from "mere assertions" about limitations or problems. In our view, both ought to be interpreted as critical citations separated by degrees.

Understanding this difference has practical value for authors as they prepare manuscripts and review submissions for publication, but there seem to be more questions than answers when it comes to the differences between critical citations. For example, "Cronin (1994) observed… that a citation can refer to the citee's work at different levels of granularity to an entire oeuvre, a cross-textual motif, a document, a passage, a single sentence, a phrase, a number); any one of these levels can be criticized, and existing schemes do not take this adequately into account" (White, 2004, p.102).

In our previous work, we imported a citation function framework that describes 11 different citation functions (Harwood, 2009). None of the 11 functions are characterized as "critical" per se. However, Harwood explains that "[engaging] citations appear when authors are in critical dialogue with their sources. This criticality can be more or less marked" (2009, p. 506).

It is important that Harwood's framework is an applied linguistic framework. It is not from design research. The framework is a product of Harwood's rhetorical analysis. The idea that a critique could be designated as more or less intense derives from the language choices an author makes and not the object (i.e. concept, theory) of critique. For example, Harwood cites Hyland's influential study of hedged language in critical citations (1999). Hyland found that strong refutational verbs like "fail," which signify sharp, direct criticism, are increasingly used *primarily* in humanities and social science disciplines while scholarly publications in other disciplines show an overall *softening* of their critical rhetoric. Harwood's framework is conducive for this sort of linguistic analysis, does impose some limits on its capacity to account for the nuanced kinds of critiques that scholars might make against Schön's work in the DRS community.

Harwood's framework amplifies two, broad categories of critical citations. The first consists of "praising but identifying problems with the source "(2009, pp. 506-507). Problems with a source could refer to weak arguments, logical fallacies (e.g. special pleading), faulty assumptions, and so forth. But these problems appear alongside general praise for a text. Harwood includes the following example quote. "Although [this paper] acknowledges that [reference's] synthesis. . . **remains the most sophisticated discussion of x, it identifies a number of difficulties** in their influential work" (2009, p. 506, our emphasis).

The second category of critical citation in Harwood's paper emphasizes "inconsistencies in the source's position" (2009, p. 507). As an example, Harwood describes a citation in which a source is attacked for what one critic saw as an inconsistency between a source's stated theoretical framework (Marxism) and a lack of attention paid to "property" in a particular analysis.

Harwood's framework appears to be a useful way to take first steps towards understanding critical citations in DRS publications and, more broadly, towards developing a tool or method for analyzing critical citations in a designerly way. That is, we can apply Harwood's framework to critical citations and frame our application of it as a kind of usability study. What works well and where can it be iterated, improved, and made more designerly? In the next section, we model our analysis of critical citations of Schön's work on Harwood's approach.

4   A Linguistic Analysis of Critical Citations

In this section, we present two cases of authors engaging critically with Schön's work. First, we examine Spencer & Hilton's 2010 Montreal DRS conference paper. Second, we examine Wallis & Williams' paper from 2012 Bangkok DRS conference. Both papers demonstrate hedged, indirect

critique of Schön's work -- illustrating some of the rhetorical nuances we discussed in the previous section.

4.1 The Value of Stimulated Dissatisfaction (Spencer & Hilton, 2010)

Spencer & Hilton aim to discuss and enhance Schön's model of the reflective practitioner. Specifically, the authors argue that "the reflective practitioner model of the designer must address the stimulation of dissatisfaction as a condition of creative and explorative design practice" (2010, p. 1384). Although Schön's model *appears to be* at the core of this paper, citations of Schön's work are scarce. In the text, we found only four citations. Three of these referenced *The Reflective Practitioner* (Schön, 1983) and one referenced *Educating the Reflective Practitioner* (Schön, 1987).

Of these four citations, only two address a precise flaw in Schön's work. This means that only two are critical citations:

> *Schön describes the good reflective practitioner as being willing to enter into new confusions and uncertainties, but does not provide a good account of states of confusion or the experience of uncertainty and how these affect reflective inquiries. The conversations that Schön presents (1983 & 1987), focus upon illustrating how naming, framing, making moves toward solutions and evaluating through reflection develop through dialogue, focusing upon design content and action (descriptions of solutions and frames; and explanations of moves and reflective behaviour). Schön does not highlight what it is like, experientially, to be in a reflection-in-action moment. Nor does Schön focus upon the affect a practitioner's mental and emotional state has upon their ability to have effective conversations* (2010, p. 1386-87, emphasis ours).

The other citations tend to praise Schön's work, thus using the rhetorical formula (praise + critique) Harwood describes in his text. For example, the authors recognize Schön's model as the "the last paradigmatic shift in support of Design Thinking" (Spencer & Hilton, 2010, p. 1385).

While the paper seemingly aspires to be a general critique of Schön's work, it contains few critical citations, which provides an interesting insight relative to our finding (2016) that scholars publishing at the DRS conference tend to use Schön's work uncritically. It may be true that there are fewer critical citations of Schön's work, but critique can still be present.

Indeed, it seems possible to criticize a concept or an idea outside the boundaries of a given citation. For example, it would be possible to cite one of Schön's concepts (e.g. the reflective practitioner) at the beginning of one paragraph and then criticize him in the next paragraph *without citing again*. We probably would not have counted an example like this as a critical citation simply because the critique did not appear in close enough proximity to the citation. Thus, it may only *appear* that scholars primarily use Schön's work in uncritical ways.

Our intention is not to exonerate authors who critique Schön but do not include citations in proximity to their critiques. In fact, citations are even more crucial in the context of critique. Critics must be held accountable for their critiques, but they must enable readers to hold them accountable by pointing towards the problematic source material. Only by pointing to the source material can the substance of their critique be judged. Is it a good critique or a bad one? Do the authors draw attention to a major flaw? Or a minor one?

These latter two questions are challenging to answer. Harwood uses rhetorical analysis to gauge the severity of the flaw. So, for example, Harwood might point out how Spencer & Hilton use phrases like "does not provide," "does not highlight," or "does not focus" when they refer to Schön and/or his work. Their rhetorical choices do not appear to contradict or refute Schön outright. Instead, they appear to delimit an area that Schön left unexplored. But what is the significance of this unexplored area for the design research community? Just because an area is unexplored does not mean that it is worth exploring.

So, we are left to ask ourselves whether Spencer & Hilton are critiquing something central to Schön's work and important for design research? What would be the value of expanding what Spencer & Hilton see as the apparent limitations Schön's model? Moreover, how do Spencer & Hilton intend to critique the limitations of the model without engaging its foundational theory, such as pragmatism (Dewey) or tacit knowledge (Polanyi)?

4.2 Researching the One-on-one from a Learning and Teaching Perspective (Wallis & Williams, 2012)

Similar to Spencer & Hilton, Wallis & Williams (2012) examine an alleged weakness in Schön's model for educating the reflective practitioner. The studio, the authors suggest, may very well be useless nowadays.

> "Webster amongst others states that the tradition of the 'studio', in particular Schön's portrayal, may be unhelpful and outdated yet, enduring, lauded, well known and convenient" (2012, p.1972).

Crucially, Wallis & Williams do not critique Schön themselves. They cite Webster's critique of Schön. In our view, this *secondary critique*, by which we mean citing another author's critique of a source, reaffirms the importance of making strong, cogent arguments for the strengths and weaknesses of a given scholarly source. If we read Wallis & Williams' text *only*, then we do not know whether Webster authors a more cogent critique of Schön. We rely on Wallis & Williams' characterization of it, which could be problematic.

Is it sufficient to quote Webster's published work to demonstrate that Schön's conception of the studio may be unhelpful and outdated? While publication certainly does lend credibility to an argument, absent deeper engagement with the source text we cannot assess whether Webster's point about the studio is a cogent argument or a secondary (or tertiary) point made in the context of a broader discussion of Schön. Read Webster's text becomes a crucial step toward assessing Wallis & William's argument. However, in this scenario, our interpretation of Webster's argument will be independent of any frame Wallis & Williams could have provided.

We maintain that, given page and word count limitations imposed on scholarly publications, it is unreasonable to expect authors to engage in depth with all of their sources (2016, p. 26). However, Webster's position, or, perhaps more accurately, Wallis & William's interpretation of Webster's position, is a crucial component of their project. In other words, if Webster is *in*correct and Schön's portrayal of the studio is helpful and current, then the grounds on which their project rests erode. For this reason, it seems important (if not necessary) to discuss Webster's text in more depth. Consider Wallis & Williams statement that:

> "In Webster's opinion (2004b) the lack of learning and teaching theory in the 'studio' means that tutors rely on their own experiences and mentoring but are unlikely to engage in critical reflection" (p.1978-1979).

Here, the authors characterize Webster's position as an "opinion" rather than an argument. This is troubling since opinions, by definition, do not have to be based on facts. Why would Wallis & Williams describe the source of crucial grounds for their own project as an opinion rather than an "argument" or "findings" or some other term designed to enhance rather than detract from the credibility of the source? Paradoxically, it seems as though they frame the source material, which bolsters their claim that Schön's concepts are problematic, as problematic itself. It is based in opinion rather than rigorously developed scholarly knowledge.

Our point is not that Webster's conclusions are *truly* weak or specious. Rather, it is that Wallis & Williams have not necessarily done enough to convince readers that Webster is a substantive, reliable source. They could have accomplished this by dissecting Webster's argument in more depth, exploring *its* strengths and limitations, in the service of motivating their own project. Why does

Webster argue that Schön might be unhelpful and outdated? Why should readers value Webster's opinion on the implications of theory's role (or lack thereof) in design studios?

5 Towards Designerly Citation Analyses

Our analysis illustrates some of the ways in which scholarly critiques can be mellow and amicable. Some scholars have implied that "real" critical citations are supposed to be apparently "negative" or "refutational" (White, 2004, p. 100), and one might expect critique to directly reject the work of a particular author. However, as White further suggests, direct rejection is rare. Indeed, Spencer & Hilton's critiques serve as ways to build on Schön's model, which requires maintaining some of its integrity. On the other hand, Wallis & Williams' critiques are secondary, and although their secondary source questions Schön's, Wallis & Williams do not undertake a substantive analysis of his work. Following Sennett's argument, in a society where "everyday diplomacy reigns," it may be the case that sharp and direct critique is becoming scarce.

In our view, at least one thing is clear: it may be necessary to develop a more robust citation framework capable of describing nuanced kinds of critical citations. Despite what we see as Harwood's genuine attempt to capture scholarly efforts to expose a source text's weaknesses, his categories lack the kind of nuance we may need in order to assess the current state of scholarly critique. Harwood distinguishes two types of critical engagement. These are: (1) praising but noticing problems, and (2) identifying inconsistencies.

These types of critical engagement may inspire readers to explore and iterate on the different ways that a given source text might be problematic *and* the possible way(s) a text might be inconsistent. For example, there could be an inconsistency between an author's stated theoretical framework and the nature of their analysis, and this would seem to be a valid critique. However, we wonder whether there are broader implications.

Where does an inconsistency between a theoretical framework and an analysis fall on the spectrum of scholarly critique in design research publications? Is it substantive or perfunctory? Is it a real critique (White, 2004) or not? Does the stated inconsistency point towards deeper issues with an overall argument or analysis? Is it a substantial critique to identify a missed analytic opportunity as opposed to, say, inaccurate analysis or poor synthesis?

Moreover, the analyses we present in the previous section motivates questions that cannot be fully answered with a rhetorical approach. *What is the significance of a given critique for the design research community? What, if anything, makes a given scholarly critique designerly?* We believe that these questions can only be answered by design researchers after analysing critical citations from a standpoint that gives primacy to design as opposed to linguistics or rhetoric, both of which are useful and valuable for different reasons. Harwood's framework is designed to be used across disciplines, but we may need a citation framework developed for and by design research. And, if we do, then we believe a valuable place to start would be developing a richer account of critical citations.

Harwood did not focus on critical citations. His goal was/is to develop a framework that could explain multiple, overlapping citation functions. In doing so, he enriches our overall understanding of just how meaningful and intricate individual citations can be. On the other hand, since none of the individual functions are developed in detail, we walk away inspired to work towards a deeper understanding of each one. Critical citations, which Harwood calls "engaging" citations seem like a reasonable place to start for design research.

5.1 The importance of a designerly framework for citation analysis

Developing a more detailed vision of critical citation practices appears crucial for understanding how to expand and enrich scholarly critique in design research publications. In our view, following arguments by both Sennett (1978; 2012) and Margolin (2016), enriching critical citation practices is

one way that design researchers might turn existing citation practices in the field into preferred ones. Moreover, we reaffirm the importance of practicing fine-grained citations (Friedman, 2015, p. 21) in the context of scholarly critique. For example, we missed an opportunity to learn about Webster's critique of Schön when we read Wallis & William's (2012) paper. A crucial question for this trajectory is: what next steps could we take to establish a designerly framework for critical citation analysis?

One way forward could be to look for inspiration and guidance in the design research literature. It would be possible, for example, to draw on Anthony's classic work, *Design Juries on Trial* ([1999] 2012, p. 108) and to propose that the three types of design jury criticism (normative criticism, interpretive criticism, and descriptive criticism) provide a useful preliminary framework for analysing critical citations in design research publications. Such an approach could be seen to reframe peer review as a design jury and papers as design proposals, which strikes us as an interesting and potentially valuable approach for the design research community.

5.2 The importance of critique in design education

Both Spencer & Hilton and Wallis & Williams denounce a lack of training in critique in design education. The former argue that Schön did not explain how designers can be (or become) critical of their own work. They stress that, "It is expected that experienced practitioners may generally have **become more critical, more dissatisfied"** (2010, p. 1392, emphasis ours). But, they argue, Schön does not explain how this happens. Similarly, Wallis and Williams stress that critique is not necessarily explicit when a mentor corrects a project in the studio model. "Tutors rely on their own experiences and mentoring but are unlikely to engage in critical reflection" (2012, p. 1979). Hence, design students might not be able to critique their own work as they don't know how to proceed.

This lack of training in critique might be a methodological problem (e.g. how to articulate a critique) or a theoretical one (e.g. which theories one should know in order to be able to critique in design). Returning to Margolin, this might be tied to PhD training in design. "Within the realm of design doctorates, there is no consensus on what foundational texts to read, what methods to master, or whose work one would need to know about" (Margolin, 2016, p.7). This becomes even more problematic in the design community as it educates more and more researchers without any comprehensive, unifying research vision. "This has vastly increased the number of researchers with doctorates but it has not contributed to the coherence of a field and certainly not to the formation of a discipline." (Margolin, 2016, p.1).

In order to transform the DRS *from a society to a community*, we strongly advocate for the role of critique in design research scholarship to be valued and explored in more depth, which involves engaging with and building on current studies (Oh, Y., Ishizaki, S., Gross, M. D., & Do, E. Y.-L. , 2013; Dannels, D. P., & Martin, K. N. , 2008 ; Uluoğlu, B. ,2000).

6 Conclusion

Given the strong culture of critique in design, it is interesting that we find so few critical citations in DRS scholarship. Building on our previous work (Beck & Chiapello, 2016; in press), in this paper we examine four years' worth of DRS conference proceedings (2010, 2012, 2014, 2016) to determine how many publications criticize the work of Donald Schön and how they go about structuring their critiques. We identified only two papers containing a combined total of four critical citations of Donald Schön's work. Is this good? Should there be more scholarly critique?

We make no claims about the generalizability of our findings to design research. For instance, it may be the case that other kinds of publications, such as book chapters and journal articles, contain more examples of critical citations. An important trajectory for future work would be to examine different kinds of publications to see whether this might be the case. On the other hand, it may also be true that, in accordance with White's (2004) argument, there are fewer critical citations in general in academic communities.

In this paper, we presented two cases of critical citations of Schön's work. Because there were so few examples of critical citations, we became interested in capturing the nature of these criticisms. Were they sharp and direct? Or mellow and amicable? Moreover, we wanted to understand how such critiques work. What rhetorical techniques (e.g. hedging, and so forth) did they employ? To conduct our analysis, we started from Harwood's (2009) applied linguistic framework. However, in this paper, we complemented Harwood's framework with additional insights about critical citations from White (2004).

We found that the handful of critiques of Schön were balanced (and thus softened) with praise (Harwood, 2009). In one case, the critique was secondary rather than primary. Wallis & Williams (2012) cited a critique of Schön but did not elaborate its substance in any depth. These findings interested us since we had expected to find more direct refutations and/or stronger intellectual arguments against Schön's work. Instead, we found vague indications of unexplored territory, descriptions of possible limitations, and reliance on others' critiques.

Citation function framework from applied linguistic like Harwood's (2009) seem to be useful. Linguistic analyses can reveal the general perspective on a source or concept. However, such analyses may be limited in their capacity to establish the overall quality of a particular critique. That is, it cannot expose whether a critique is robust or thin, good or bad, and so forth. It may only be possible to make judgments like these with the support of an analytical framework developed from within the design research community. Relying on applied linguistics seems insufficient for the broader purpose of establishing a unique intellectual culture for design (Cross, 2001).

Following Margolin (2016), we argue that members of the DRS ought to be more attentive to the state of their community, and, in particular, to the role of critical citation practices in its scholarship. If we continue citing key scholars like Schön uncritically, we potentially do a disservice to their contribution and legacy in our community as well as others. We hope that this paper might serve as a catalyst for developing a richer culture of critique in scholarly writing in the design field which, we hope, could also be seen as a step in the direction from a society toward a well-rounded academic community.

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