

Interaction Criticism: How to Do It

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Foreword

This document combines seven blog posts on the topic of “interaction criticism” that I composed in the summer of 2008. I have compiled it into a single document (a) because I want to revise it into a proper paper and thought it would be easier to work with this way; and (b) I realized that rather than making people click through blog posts, this format might be easier for others to use, as well.

That said, it is mostly unedited from its blog form. Please do not confuse the polish of this new form for polish of the content; put another way, this is just blog content and represents a first pass, not an authoritative revision. That, with any luck, will appear under nicer auspices than this!

Note: Shaowen Bardzell and I coined the term “interaction criticism” in a 2008 paper that can be found here: <http://portal.acm.org/citation.cfm?id=1358703>

1. General Introduction

In my previous post [<http://is.gd/t0qB>] I concluded that those of us who have a foot in the two worlds of literary/art criticism and interaction design should promote interaction criticism. I often get asked—by students, by design professionals in the HCI community—how someone without degrees in literature (etc.) can practice criticism. It’s tempting to resist such a request and point people at a bunch of handbooks of literary theory, and I’ll probably also add a post that does just that.

But for the sake of accessibility, and at the risk of being flamed for attempting to present the practice of criticism in a bullet-list laden blog post, I offer a high-level overview of what (I think) interaction criticism looks like. To make it manageable, I divide it into sections:

- **Part 1:** What generally a critic has to offer, that is, high-level goals
- **Part 2:** Low-level, everyday strategies of applying “close reading” to interaction design experiences
- **Part 3:** Techniques for robustly and powerfully interpreting experience with interaction designs
- **Part 4:** Some general thoughts on how to present these interpretations in the form of a critique
- **Part 5:** Analysis of critical writing: Design magazine reviews

- **Part 6:** Analysis of critical writing: Academic design writing
- **Part 7:** Further reading: an edited list of accessible works on criticism

Without further ado, the rest of this post is devoted to some rough thoughts on what I think the primary strategies of the critic.

High-Level Strategies: What an Interaction Critic Does

Critics make sense of cultural artifacts in part by thinking deeply through associations, that is, what a particular interactive artifact can be connected to. Connections might include personal, socio-ideological, material, bio-historical and other associations. Though computationally we often represent knowledge hierarchically (remember Yahoo in the mid-90s?), humans think associatively and metaphorically (see Lakoff and Johnson for more on this). Critics cultivate these associations in profound, reflective, personal, and intimate ways as a means to develop deep, subjective understandings of phenomena. (In other words, I am certainly not talking about a network diagrammable set of objective relations; each critic builds her or his own networks of connections.)

Critics model expert reading (or, in our case, they should model expert interaction). What this is not: How do people do X (which is an empirical question that psychologists of aesthetics and user researchers often ask)? Instead: How does an expert do this to have the most comprehensively aesthetic experience possible (which is a speculative question without a definitive answer)? The point is that there is no single best or authoritative reading or interaction, and therefore there is no one to point out what that would be. The critic instead models how she or he approaches an interaction with the goal of doing so in the richest, most fulfilling, and/or most worthy way. Those who read criticism incorporate these models into their own interpretive practice.

Critics identify “resonant” passages and examples. Social scientists often seek to find representative passages, and so we get sampling, statistical significance, and so on; in doing so, they are trying to get a handle on “what’s out there.” Criticism identifies passages not by claiming they are representative, but rather by claiming they are “resonant” of something deep and messy (in speaking of “resonance,” I am appropriating Stephen Greenblatt). Often what resonates to a critic is below the surface consciousness of the designers (i.e., their intentions) or their users. This may sound elitist or perhaps even somewhat hocus-pocus, but it need not be; Dick Hebdige’s classic study of subcultures revealed much behind the emergence of punk and countercultural fashion and ideology that none of its stakeholders—the punks themselves, the music industry, the fashion industry that both sells to and borrows from them—were aware of. Thus, the worth of one critic’s versus another critic’s “resonant passages” is connected to erudition, insight, experience, conceptual command, and domain expertise. The cliché that “everyone is a critic” may have some truth, but that certainly does not mean that everyone is an equally good critic!

I'll wrap up part 1 here. I welcome constructive criticism and insight. I am putting this out there in good faith and hope to expand criticism to a new domain, rather than impoverish it by oversimplifying it. If you can help me walk that line better, I certainly want to hear from you!

2. Low-Level Interpretive Strategies, or, Things to Look For

In Part 1 of this series, I covered three high-level critical strategies: thinking through associations, modeling the act of reading/interpretation, and identifying resonant passages/examples. Reading through them, I can imagine interaction design professionals thinking that all that sounds fine and well, but still not really knowing how to go about doing those things with any clear purpose, let alone rigor.

This post will offer much more concrete, do-it-yourself strategies that I believe anyone could start doing today. It's not a comprehensive list, since the whole point of what makes a critic a critic is a personalized and cultivated habit of thinking that consistently leads to productive, deep thought. We all develop this over time, through practice, and (of course!) through engagement with other critics and acts of criticism. All too often, however, this need to develop one's own critical voice becomes an excuse not to teach critical strategies explicitly, out of the fear they will be misappropriated or used in slavish and/or stupid ways. (Deconstructionists were infamous for denying that deconstruction was a "methodology," which was a legitimate philosophical point that somehow wound up in service of obscurantism.) Misappropriation is a risk we'll have to run.

I'll stop ranting here. :) As always, the goal is to make critical approaches accessible and try to walk the line between oversimplification and obscurantism.

Critical Reading Strategies, Or, How to Do a Close Reading of an Interaction Design

Following are six particular strategies you can use, which are not presented in any particular order and which are interrelated anyway.

- Try to make explicit to your own consciousness the overall effect ("gestalt" or "organic unity") of the design. Next, identify diverse elements (graphics, interaction types, uses of language, fonts, white space, etc.) that make up that overall whole. How does each individual element contribute to/compete with/undermine the whole? How does the particular combination, juxtaposition, or "syntax" of these elements give them new or interesting meaning?
- Seek out the affective. It's no secret that information, cognition, and disembodied universalizing knowledge have been dominant in interaction design for decades, often excluding emotion, affect, embodiment, desire, etc. HCI is belatedly addressing this, and critics, I think, are uniquely positioned to help interaction designers become more sensitive to these thoroughly subjective phenomena. Interaction is personal. Make that visible.

- Identify key terms/concepts in the interaction (e.g., the user, the participant, the company, the site, its value to you, incentives, other users, news, truth, terror, home, ethnic). Next, rather than passively accepting these terms as representing something “we all know,” explore the extent to which this term or concept is constructed in the interaction design, that is, how it is described, labeled, and positioned. How else could it have been positioned or constructed? Why would the designers/company behind the interaction have positioned or constructed key terms in these particular ways?
- How does the design “want” you to interact with it? Literary critics say that every novel projects its ideal reader. Surely interaction designs do the same. How does a design construct and project its ideal user? What are ways to resist this projection? What are the consequences of resistance? Griefing, emergence, harassment, evolution, and frustration (that is, some of the most important issues in HCI) all seem tied to resistance.
- Interaction designs often change our relationships with other humans. In some cases, an interaction design replaces interacting with a human (such as an ATM). In other cases, it may facilitate interactions with humans that you might never have otherwise known (e.g., World of Warcraft and Second Life). In still other cases, it may facilitate simple interactions that help maintain one’s largest social networks (Facebook, Twitter, etc.). In each of these, technology enters human-human relationships, and in so doing, shifts them. What are those shifts and how can we intervene as designers to understand and then encourage the best outcomes?
- Examine the marginal. If we can understand why something is in the margins, we can often understand better features in the mainstream. Marginal content/features often reflect social anxieties (e.g., the reluctance to talk about human sexuality in HCI), arbitrarily subordinated discourses, and opportunities for future innovation.

Some More General Thoughts

OK, so that list gets at many of the things critics look for when they do a “close reading.” When I was doing close readings in literature, I would read the same thing over and over again. Through repeated readings and reflection, those patterns, those margins, and those resonances begin to become visible. In each iteration, the critic is focusing more or less on the same things; what happens is that focus evolves, or dials in, and when that happens, that which is hidden and yet often most significant begins to emerge.

3. Building a Critical Interpretation

In the previous part, I laid out some critical reading strategies, that is, techniques that critics use to identify specific interesting or resonant passages/elements of a cultural artifact, for example, particular passages from a novel, phrases/diction from a poem, phrases from a sonata, architectural details in a building, camera angles in a film, or the shapes of the heels in haute couture footwear.

What does a critic do when she has identified a number of interesting individual elements, passages, or features? The critic develops a critical interpretation, that is, an expository explanation drawn from an analytical reflection on each of these elements or features. The development of this interpretation is the subject of this post.

A note before I begin: The linearity of a multipart series and written discourse itself exaggerates the linearity of this process. It is, of course, not at all the case that a critic identifies resonant passages without having any idea of the interpretive direction. Having a sense of your overall purpose and audience obviously shapes the kind of things you look for in the first place. Anyway, the point is not to take the implied linearity of what I am writing as a step-by-step recipe to be followed in order. I only separate strategies to tease out nuance that might be hard to see otherwise.

Now, the critical explanation that the critic is trying to produce may or may not make claims about the work as a whole. A book review ultimately does offer an overall sense of whether one should buy the reviewed book. But one might equally only focus on a focused aspect, such as sound design in several French New Wave films; these critiques may not say much of anything helpful about the overall quality or entertainment value of these films, though they would help filmmakers and students of film master their craft. And “critical theory” in its classic sense, associated with the Frankfurt School, studied cultural artifacts with the hope of exposing social injustice in such a way as to facilitate (design) interventions; they had comparatively less to say about the overall aesthetics of a work.

In other words, although a critical interpretation organizes resonant passages around a coherent and largely unified theme, the particular direction of the theme is up to the critic. Or to put it another way, the reason for the criticism (book/fashion/film reviews in the newspaper, criticism in service of product design, art or aesthetic criticism, etc.), the intended audience of the critic, and the critic’s own dispositions determine or at least shape the theme.

For professional interaction designers, my assumption is that criticism would often be oriented in one of two directions. If a designer has a specific design problem, criticism would be oriented toward generating insights particularly useful to that problem or problem space (e.g., if I were designing an interface for an online radio station, I might do a critique of the Pandora’s training interface as an instance of experience design). If, on the other hand, the designer wants to improve her craft in a more general domain, criticism could accordingly be geared to understand a particular technique, material, or experiential effect (e.g., if I were designing wearable computing, I might critique instances of high functionality in haute couture, say, compartmentalization in Louis Vuitton handbags, and then contrast it to fashion in high tech gadgets, such as, say, a GPS device built into a BMW). (Damn—I just made that up, but it sounds like a fun project!)

Specific Strategies of Critical Interpretation

Obviously, it is harder to be explicitly directive in this step, as opposed to part 2, but I can offer a handful of broader interpretative strategies that are at least illustrative of common patterns in this step.

- Reflect on and relate what you are seeing to prior/similar examples. This reflection is not casual; it is creative, erudite, innovative, speculative, thoughtful. It cannot be lazy or complacent. You, the critic, are constructing meaning by examining these relationships—*you are not decoding or finding what is empirically there* (social sciences are much better suited to this goal). Instead, you are offering a new way to see or think about something; you are developing the very concepts that you and others later on (including social scientists) will use to understand and evaluate a phenomenon in a new light.
- Speculate: What would X look like if...? Elizabeth Churchill often uses the metaphor of science fiction when talking about design. She thinks of design as offering a fictive projection of a possible future, a possible world. This fictional world isn't uselessly disconnected from our reality; instead, it is connected to our reality through ... design! But the point is that this is only possible through speculative leaps of imagination, not through evolutionary iteration (which is obviously valuable too, just in different ways). The key obviously is that some speculation is vacuous, implausible nonsense, while other speculation can be operationalized into a design strategy. Here the quality of the critic (to have a worthy vision in the first place) and the designer (to evaluate/develop the plausibility of the vision) work hand-in-hand.
- Expose the hidden in order to subject it to possible intervention. One of the primary contributions of criticism is its expository nature. Criticism renders visible aspects of our lives that are so everyday that they seem natural, and yet they are arbitrary (i.e., could be otherwise), and they may also be undesirable. For example, Foucault's theories of power implicated knowledge production in the social sciences within systems of power, exposing a dependence of knowledge professionals on the docility of disempowered groups (e.g., mental patients, prisoners, schoolchildren). Today, human subjects committees reflect a sensitivity to this relationship and proactively intervene to manage it. Roland Barthes' critiques of popular culture (magazine advertising, slogans, clothes) brought the rigor of literary analysis to texts hitherto considered unworthy for that type of analysis; one benefit has been to raise our collective awareness of how the values of dominant social classes are insinuated into everyday life.
- Use concepts from criticism (e.g., organic unity, construction of the self, panopticon, dialogic, signifier, space/place, story/discourse, base/superstructure, embodiment) to develop one's understanding of cultural artifacts and their features. I say "develop examples," not "tag examples" because we are not trying to find an example of X concept; rather, we are trying to use concept X to help us think creatively and originally and profoundly about a particular cultural artifact in such a way that we understand the example much more robustly than we would without the

concept. This sometimes leads to a technical vocabulary that is hard to understand, which can lead to one of two unfortunate extremes—obscurantism (e.g., deconstruction’s “mise-en-abyme”) or banality (e.g., “the medium is the message”)—even when the original contexts and uses of that vocabulary are intellectually powerful (as is the case in Derrida’s use of deconstruction as a critique of Western philosophy or McLuhan’s theories of media).

Common to all of these is that the interpretation itself is original, carefully and rigorously developed through extensive reading and reflection. Its contribution is not the glimpse into external reality it affords, but rather an expert’s take on that external reality, with the assumption (that must be justified) that the expert’s take helps us understand that reality in transformative ways, that is, ways that transform how we act or understand this reality. Because it is about the expert’s take, criticism is not fundamentally empirical, though of course empirical evidence surely contributes to the expert’s take in important ways. In simpler terms, the expert interpretation, not the data, is the message.

In the next part of this series, I will talk about how criticism is written. As a form of intellectual prose, it has distinct features and characteristics, and these are often different from the forms of prose that social science is often embedded in. As I have tried to show, the two enterprises have different goals and epistemologies, and it should not surprise that their written forms also differ.

4. Produce a Critique, Or, What and How to Write

I wasn’t quite as sure what I wanted to say for this segment. I have taught composition for years and have a lot in general to say about that, but that wasn’t really the right direction for this post. So, to be perfectly honest, I am a little less certain of what I am saying here, but it is a blog post, so I will put something out there, and perhaps later I will be able to iterate on it and make it better.

As a starting strategy, I decided to go back and read a bunch of criticism. Not theory (i.e., abstract philosophical reflections on interpretive strategies, such as “semiotics” or “new historicism”), but actual criticism, in which a critic talks about actual, explicitly named cultural artifacts. I started with Roland Barthes’ *Mythologies*, because, well, that collection of short critical essays on everything from soap to Greta Garbo’s face is kind of an intellectual comfort food for me. As fun as that was, I realized that Barthes’ pop culture criticism was a little too far away from design criticism, not in the artifacts considered, but rather in the gist of his criticism, which was to expose cultural “mythologies” (often bourgeois values foisted on everyone as if they were natural, with a particular emphasis on the role of language in making that possible), whereas design criticism is typically more focused on the aesthetic response of its intended audience/user.

So my next step was to go to Barnes and Noble and buy a bunch of design magazines: *inDesign*, *Objekt*, *I.D.*, *Architect*, and *Case da Abitare* (which also gave me

an excuse to practice my rusty Italian). There were others (this was one pricey Barnes & Noble trip). So I wanted to see how design writers write about design. Where there were interviews, I wanted to see how the designers themselves explained their designs. The goal was to see, in simplified and clarified form, what design discourse looks like as a discourse. Who is it written for? How long is it? What does it talk about? What are its central themes? And above all, how does it differ (both textually and epistemologically) from social scientific writing?

HCI as a field traditionally writes within the social science paradigm. As HCI increasingly embraces design, and here I am opining a bit, it seems to me that HCI seems to continue to want the familiar form of social scientific writing but amplified with the new content/insights of design-oriented thinking. The thing is, and here is a rant for another day, the form of social scientific writing carries with it epistemological positions that are appropriate for social science, but not necessarily appropriate for design critique. To say this another way, if you want to see legitimate design critique, you (HCI community) have to develop literacy in another paradigm of writing. Because when critique is translated into social science (which is how most critical approaches to HCI get past the gatekeepers), while it may certainly have its own rigor, value, and contributions, it has become something other than critique.

Briefly, the classic social science publishable paper looks more or less like this:

- Introduction
- Literature review
- Methodology
- Results
- Discussion
- Conclusion

There is nothing wrong with this structure and I am not attacking it. But it makes fundamental assumptions about the type of work being presented, and it foregrounds a certain kind of intellectual rigor (namely, formally executed empirical research). If, however, one brings to the table a different kind of intellectual rigor (say, criticism), one either must shoehorn the contribution into this template and thereby play to one's own weaknesses (criticism is hard to explain in terms of a formal execution of a "proven" methodology), or one must resist the template and risk alienating an audience whose respect is best earned through excellent use of the template.

OK. So how did designers talk about their designs? How did design writers write about design?

Obligatory disclaimers paragraph! Obviously, the many critiques I read were diverse in their themes and approaches, so I'm simplifying. Also, note that magazine critiques are not academic and they are generally very positive (even gushing—I think one of their cultural functions is an intellectualized form of marketing and promotion, but I'm going to leave that alone for now).

Good design is not something one really tries to understand with empirical precision. Instead, designers and design aficionados “develop and eye for” good design, much like (to borrow an example from my colleague Erik Stolterman) a wine lover develops a taste for good wine, or a literature enthusiast develops a sense of what makes a great novel or poem. Now a good work of culture is often described as having a “je ne sais quoi,” an I-don’t-know-what, that is, something that you can’t express but which makes it good. A central problem of the social aspect of design (from merely expressing appreciation to developing product lines or teaching design in universities) is that good design is ineffable; it can’t be put into words. But to be socially useful, it must be put into words.

And so one of the core contributions of the critiques I read was to try to get behind this je ne sais quoi and try to explain rationally why a design has the aesthetic effect that it has. One article described a major house remodel. It described the original construction, including building materials, spatial form, historical context, and historical style. It described the new design, by explaining its process. For example, it talked about conflicts and the decisions (and their grounds) that led to a resolution. It spoke of both form and function, but more often than not about how they harmonized (blurring, rather than accenting, the distinction between them). It talked about the use of color, and the cultural associations of the colors (e.g., white = pure). It talked about the designer and noted that his designs recall the style/influence of an earlier designer. Here are the final lines of the article:

The house is still relatively modest in size.... However, for [the homeowners], the internal spaces, together with the garden, seem more than adequate. “Space is all relative. It’s not just the size of the space. It’s how they feel.”

From the point of view of positivist science, the last line, “it’s how they feel,” is cognitively empty. What could “it’s how they feel” possibly mean? And yet, it’s clear from its position (the closing words of the article) that it not only means something, but in fact it encapsulates all that has come before it and offers a satisfying conclusion. Now, I’m not advocating that design discourse should tolerate muddled writing. I am saying that aspects of the aesthetic response to design, which is shared by designers and design aficionados, are both ineffable and yet also shared.

So this blog series is subtitled “How to Do It,” and now I feel some pressure to say something fairly explicit and directive. I’ll try. One major strategy in design criticism is to attempt to rationally explain the je ne sais quoi of a design. To do so, one attempts to show how the design has (to borrow a phrase from literary theory) “organic unity.” Now, the origins of this unity are incredibly diverse:

- Form and function
- The cultural semantics of individual design elements, such as colors
- The tendencies, history, and semantics of its materials
- A design as a physical record of a process of decisions (like an exposed cliff shows the history of sediment that composes it)
- A design as an instance of one or more styles

- A design as an instance of a designer's work (where the designer is also an instance of a history of designers and styles)

The contribution of the critique is to make these and similar issues visible and explain how they relate to each other to compose the organic unity of the design, which in turn presumably helps demystify the *je ne sais quoi*. And that in turn facilitates practical and useful communication about something (a design) that is difficult to put into words, because of its culturally embedded complexity and the wholly (and ineffably) subjective nature of an individual's experience of it. To be able to perceive and analyze these different design issues or characteristics requires expertise and a certain kind of intellectual rigor (perhaps above all, an erudition of similar artifacts). But again, claims about any one of these issues (e.g., the meaning of a color, the influence of rococo on a given interior designer, the "feel" of "warmth" given off by a given material), let alone claims that assemble them together into an interpretation, would be daunting to evaluate as truth-claims, in the social science sense. They are not conclusions derived from data obtained by following a proven methodology; neither are they tightly derived inferences from the data itself. They constitute an expert's interpretation.

Perhaps the skill of writing critique is also ineffable. Perhaps the best advice I can give is for anyone who wants to be able to add criticism to her or his interaction design research repertoire is to read a bunch of criticism! I hope that this post gives my readers an idea of what to look for when they read design magazines, London Times book reviews, and other criticism hot spots.

5. Examples and Explanations of Design Criticism Writing

Before I start, I'd like to revise something I wrote in the last edition:

magazine critiques are not academic and they are generally very positive (even gushing—I think one of their cultural functions is an intellectualized form of marketing and promotion, but I'm going to leave that alone for now).

It remains true that most of what I am writing about comes from magazines, and not peer reviewed journals, so I don't want to lose sight of that context. That said, the "gushing" I referred to was not quite right. After flipping through a bunch of magazines again, I realized that I needed to distinguish between features and reviews.

Now, feature articles do lots of gushing. I think their underlying claim is, "this is an exemplary design, which everyone in the field would probably appreciate as an excellent example." Of course, identifying and being able to make use of excellent examples is a very important aspect of being a designer and a design critic, so there is nothing particularly dubious about this stance.

That said, I've seen lots of more negative writing, and that is in the review sections. Not all magazines have reviews, but those that do critique design in a much more

traditional sense, as in the following excerpt from a review of a new type face, called Emmy, written by Step Inside Design magazine's Hermann Puterschein:

Emmy isn't elegant, certainly isn't sophisticated, and it's not even very pretty. It does, however, have an honest, childlike charm.

Obviously, this—and most of Puterschein's and others' reviews—is not gushing!

I will continue to maintain, though, that design features and design reviews, though they tend to differ in tone, both commonly orient themselves to offering rational explanations of the *je ne sais quoi* of a design, its organic unity, its chic + useful innovation, and so on. One difference, though, and this is visible in the Puterschein quote just above, is that reviews critique the extent to which a design achieves these goals, and the extent to which in (not) doing so it is (not) of use to designers; in contrast, the features tend to take the affirmative as a given, and explicate how so.

So, to try to get a closer look at specifically critical language, I suspended feature articles from consideration and focused exclusively on reviews. I highlighted passages that struck me as interesting, in one way or another, from the point of view of importing design criticism into HCI. Put another way, I tried to find things that a design critic might say that (a) is of some value to me as a designer and (b) is something a social scientist practicing social science probably would not say. In that way, I could start to tease out contributions from criticism that can complement (but not replace) contributions from social science.

This post presents a number of those quotes and the reasons I found them interesting.

I'll start again with Puterschein, this time on a type face called ITC Intro:

Its tall ascenders and sweeping descenders give the design an elegant and sophisticated aura, but there's also a brushy, almost dashed-off quality to the script.... The design abounds with distinctive character shapes, from the unusual tail of the q to the baseline curve of the I to the loosely curved stroke of the g.... [The type face] has energy and movement, as if the brush that drew it was just lifted from the page.... Its sinuous capitals could easily double as initial letters; combine them with an Old Style text face and the results will be striking.... Also, because it is unusual, Intro should be used sparingly.... Use Intro for brief headlines or for a handful of words on an invitation or poster.

There are a number of different types of statements here. Some get at a very subjective reaction on the part of the critic; "aura," "almost dashed-off," "energy and movement"—the critic is interpreting the type face. His interpretation would be difficult to validate empirically, and yet any of his readers seeing the type face would at the very least understand where he is coming from. He does substantiate his interpretation by pointing to very specific elements of the artifact, such as descenders and baseline curves. Finally, he orients the review to design, by

prescribing ways that designers can use this type face (and presumably ones like it) well, that is, in their own designs, which themselves aspire to organic unity, gestalt, a je ne sais quoi, etc. Thus, in spite of the different sorts of statements, none of them ventures far from the orienting goal of offering a rational, though not empirically validated, explanation of one's subjective, yet expert, response to the artifact.

Such strategies are not anomalies, but in fact are quite common in design writing. Here is Daniel Jewesbury writing a review of an exhibition of Darren Almond's photography, this one from Source magazine.

Darren Almond's series of moonlit landscapes, which suggestively reference ... prehistory and mythology, are made using long exposures under the light of a full moon.... In fact, they're not straightforward "moonlit" scenes at all...; in these brightly-illuminated views, both time and space are made strange.... Most obviously, the details of his images are rendered soft by the exposure time.... In certain cases, the image looks as if it might have been made through gauze, and the softness is reminiscent of painting.... There are also unexpected shifts in the colour spectrum....

This passage (and I obviously edited it down quite a bit) shows a relentless to-and-fro between an ineffable visual effect Jewesbury is trying to describe, and the production technique used to cause it. At the interpretive extreme are global metaphors: myth and prehistory. We then have specific explanations of a photographic technique. Finally, we have intermediary metaphors, which help bridge between objective technique and subjective interpretations: made as if it was shot through gauze or maybe like painting. This attempt to rationally explain a culturally complex subjective interpretation is at the heart of criticism.

So far, my examples have emphasized relationships between the form of a design and its meaning. Indeed, this is a common strategy in all criticism that I have ever seen; doing it well requires expertise in both the formal realm of the design (especially technique) and the cultural significance of that artifact's whole field of design.

But there are other strategies, such as this one, written by Nancy Roth (also in Source) about an exhibition of photographs by Hans-Peter Feldman featuring 101 photographs of people, one each at 6 months, 1 year, 2 years, 3 years ... 100 years old.

The photographs are hung in a single horizontal line, in order of increasing age, so that a visitor looks at them one after the other, at a tempo that generates the idea of a biography. And suddenly, it becomes clear that the specific details of these photographs matter much less than their success in building, out of such simple materials, the very abstract idea of "a life." More generally, one begins to wonder whether in fact Feldman uses photography to propose mental events—

to re-enact the process of building complex concepts out of many concrete instances.

I spent a long time on this passage. I originally marked it as an example of criticism focused on the user (in this case, the viewer). That is, the whole passage is not based on the artifacts themselves, nor does it tell us about the photographer. The orientation of this passage is the mental process of the viewer. As someone trained in comparative literature, I have written many passages about the effect of XYZ on the reader, and what the reader realizes as she reflects on Proust's use of X, or the depiction of Y in Milton's Paradise Lost. etc. This form of criticism is very familiar to me.

What gave me pause, having spent a couple years among social scientists, was this: just who is this viewer that is having this mental process Roth describes? Is Roth suggesting that these photographs cause this particular sequence of thoughts in viewers? If we interviewed 100 viewers of this exhibit, would a statistically significant sample of them describe their thought processes like this? Because if the answer is no, and it surely is no, isn't this just the kind of fuzzy and muddled thinking that social scientists so stridently object to? Taken literally, Roth's statement probably is borderline nonsense. To "restore" it as legitimate knowledge in the scientific sense, we probably would need to do a hundred interviews (indeed, this is exactly what Czikszenmihalyi and Robinson did in their work on the psychology of aesthetics).

But there is nuance to this; Roth is writing in a short-hand that people trained in design and the humanities recognize. Roth is not talking about a sample of viewers. Roth is talking about herself, but she is doing so in a special way. She is not talking about herself as an ordinary human being, with parents, perhaps children and siblings, favorite colors, fetishes and phobias, and so forth. Rather, she is talking about her reaction as a professional critic, as someone who is highly trained in interpreting cultural artifacts, such as art photography. She is saying something like this: "Someone with a background in photography and criticism, who is immersed in this culture, who knows its history and has seen thousands of similar examples, might have the following chain of thoughts when experiencing, appreciating, and reading this collection of art: ..." That's cumbersome, hence the rhetorical stand-in of the hypothetical "viewer" who has all these thoughts.

What I'm saying is that Roth is modeling the act of reading these photographs. She is not representing an empirical state of affairs (e.g., the "content" of the photographs that she has "decoded"); she is showing us a way to think productively about a complex cultural artifact, which (once again) ties objective characteristics of the design (such as the number of paintings and their linear arrangement) to the subjective yet productive (critical, inspirational) responses and readings that aficionados and professionals have to these.

So far, I have shown lots of artifact-centric examples, and a non-empirical user-centered example, all of which are common in design, art, literary, and music criticism, if not HCI. Here is an example of a different type of strategy, a socio-

cultural strategy, from David Evans, reviewing an exhibition by Alexander Rodchenko for *Source* magazine:

[The Rodchenko collection in this exhibition] is a Postcommunist perspective not in the sense that it seeks to divorce aesthetics and politics, but in the sense that it assumes, like Eric Hobsbawm, that the Soviet era is well and truly over. Only now, it seems, can Rodchenko be appreciated as a specifically Russian master.

I don't know enough about 20th century Russian photography to say anything sensible about this argument itself. But I will point out a formal characteristic: artifacts here are interpreted as belonging to a corpus of an individual photographer, and he himself is interpreted vis-a-vis his participation in historical cultural styles that are themselves entangled with each other: Communist style, Postcommunist style, and Russian style. Don't ask me what distinguishes these three (except the fact that in Communist style, aesthetics and politics are apparently "married"), but each style is a lens through which to interpret certain photographers, and through them, their works. When making this kind of argument, the elements that make up a photograph (e.g., the article cites his subject matter, captions, and subtitles) are meaningful not in themselves, but rather as typical or atypical of a socio-cultural-historical movement—in this case, the tension between communism and Russian national identity during the twentieth century. The viewer is not foregrounded here—the viewer hardly exists at all! So again, we have a different lens for criticism by looking at designs and designers as symptoms of a particular era or cultural context.

I have one last example to share. This is from Colin Graham's review of an exhibition by Irish photographer Bill Doyle (*Source* magazine):

Doyle's gently photojournalistic eye looks at Dublin, over several decades, with an urban lyricism that tends to see the best even in the worst of the city. His Aran Islands are a spare, heroic, masculine place, and are treated with reverence.

Doyle's street photography is recognisably in the tradition of European photography, though the sharpness and self-reflexivity of, say, Cartier-Bresson's irony, is not readily apparent in Doyle's work. Perhaps a more important influence on his work is early- to mid-twentieth century American urban photography in the vein of Strand or Walker Evans....

The approach here does not closely read individual photographs, nor does it particularly emphasize production technique. Instead, talks about a collection of photographs' collective style. This style, though, itself is described less as a set of explicitly named formal features, and instead is described as the embodiments of individual photographers' oeuvres. If you, like me, don't know what Cartier-Bresson's irony looked like before you read that paragraph, you're not any wiser

after reading it, either. Here, Cartier-Bresson isn't an historical individual, who was born in such-and-such a year; Cartier-Bresson is shorthand, the name of a style.

So in this type of critique, design is made by individual artists, and these artists participate in networks of other artists. The artists themselves embody (and give name to) certain styles. If you know those people and their styles, then these sentences probably are quite meaningful.

I also want to point out the opening sentence, which I'll repeat here: "Doyle's gently photojournalistic eye looks at Dublin, over several decades, with an urban lyricism that tends to see the best even in the worst of the city." What exactly does "gently photojournalistic eye" mean? How about "urban lyricism"? What is the "best" and "worst" of the city? How can, as the next sentence asserts, an island be "masculine"? Taken literally, this sentence is nonsense. I certainly would not want those as coding categories for a visual analysis of a collection of Flickr images. Perhaps they could be operationalized in a way that would make such a study possible—but that operationalization is not offered here! Instead, what is offered is an educated, subjective response, and then a string of rich associations, metaphors, and comparisons, which to the right audience (in this case, I'm afraid I'm not really in it) is evocative and ultimately verbally expressive of the most subtle and nuanced aspects of this art.

Evocative descriptions are certainly a contribution to our understanding of these design and/or art works. And evocation can come from many places—the artifact itself and its internal language, the history of production and design choices, the genealogy of design styles, the interpretive process of a work's community, and even the national origin, gender, race, or ethnicity of the designer, the critic, and/or the viewer. Their contribution is to expand our own capacity to appreciate the cultural, semantic, formal, emotional (etc) complexity of human interaction through and with art and design—and not just appreciate it, but begin to articulate it.

If we can't, or don't bother to, articulate these responses, how can we evaluate, teach, or improve design beyond easily measurable features, such as usability, and get at what we ultimately care about most, which is human experience, enlightenment, social bonding, identity and belonging, magnanimity, and empathy, to name a few?

6. Four Directions in Academic Design Criticism

For Part 5 of this series, I sampled writings about designs from various design magazines to show examples of ways that people write about design. In it, I showed that people actually talk about design in some very diverse ways, and yet each of these ways was accepted and even used in more or less similar ways. For example, some people talk about the internal language of a design, while others talk about the design as an instance of a movement (e.g., modernism), while others describe the design's effect on the user-viewer-reader. In saying this, I am repeating an idea developed in a paper presented this year at alt.chi that I wrote with Shaowen

Bardzell, "Interaction Criticism: A Proposal and Framework for a New Discipline of HCI." In it, we argued that criticism typically derives from one or more of the following core directions:

- Designer-Centered Criticism: Explaining a design as a product of its creator.
- Artifact-Centered Criticism: Explaining a design as possessing its own "internal language" or aesthetic/functional value, and explicating what that artifact means (in itself)
- User-Centered Criticism: Explaining a design as a prompt that causes certain effects in the mind or experience of the user
- Sociocultural-Centered Criticism: Explaining a design as a part of a broader sociocultural movement, such as "bauhaus" or "Soviet" design

What I'd like to do in this post is show some examples of this kind of criticism in "serious" design discourse, by which I mean academic essays (as opposed to the magazine reviews in Part 5). As always, a goal of this entire series of posts is to demonstrate that interaction criticism offers a point of view, a type of insight, a series of methods, and (more fundamentally) an epistemological stance that differs from a scientific one. I do not here need to privilege a scientific versus critical or "designerly" stance over the other. It is sufficient to show that they have different methods, ends, and standards of rigor. The historically scientific HCI community is now openly seeking more designerly ways of knowing, and I am simply responding to that request.

The Designer-Centric Approach

I have approached this topic in the past by looking at theories about professionals/designers, especially the work of Donald Schön and those who have developed his line of thinking in design, such as (full disclosure: my program director) Erik Stolterman. But I want to get away from theory and show some examples. So here I will talk about an essay by Michael Bierut on one of his mentors and former employers, Massimo Vignelli, entitled, "Massimo Vignelli's Pencil." As before, I will string some quotes together for you and then talk a little about them afterward:

Unlike many designers, he didn't mind being imitated. On the contrary, he prided himself on creating solutions that could be replicated, systems that were so foolproof anyone could do them.... [He seemed to want to] enlist an army of disciples to design the world in his image....

[He was] [a]lways optimistic, never cynical.... Even creating something as simple as a business card ... would require sketch after sketch as Massimo tried to coax a few trusted elements and a famously limited palette of typefaces into some surprising new form....

[His singular] passion is what many of Vignelli's critics miss when they group him with a generation of designers dedicated to a sterile

brand of modernism. To be sure, he always argued for functionalism and clarity. But the rationalism of modernism requires absolute self-control.... Instead, Massimo's signature gestures—the expressionistic black stripes in the print work, the surreal contrasts of scale in the architecture, the inevitable intrusion of sensuality in the product design—were utterly intuitive, almost indulgent, and clearly as impossible for him to resist as breathing.

[Years later, the author revisits Vignelli's studio, after Vignelli has left it, and decided to leave a note for him, on Vignelli's desk, and using the master's signature pencil.] I picked up the pencil to leave a note and the familiarity of the sensation shocked me: I had switched to easier to find (and easier to lose) cheap black pens a long time ago. And when I looked at what I had written, I noticed something funny about the handwriting. It looked just like Massimo's.

This is a beautiful essay and I get goosebumps just retyping its closing words! What a lovely tribute! But that's not my purpose here.

I'd like to say a few things about the rhetoric of this piece. It talks about Vignelli as a designer, saying a few things about his philosophy and personal style. It continues to talk about how he fit into the dominant design stylistic movements of his age (the business about modernism), the particular characteristics of his work (his expressive indulgence), and how he has affected the author as someone familiar with his work. In short, this essay hits on all four points of design.

I call this designer-centered criticism, though, because the designer transcends the other three categories. Yes, you can call him a modernist, the author writes, but he's bigger than modernism; indeed, Vignelli transcends modernism exactly where modernism is itself weak. The designer stands as a critique to all of modernism. You can also talk about the particular features of his design—the expressive lines, the sensuality of its scale—but these are just signifiers of the designer behind them. He is not defined by these features; he, in his personality, biography, and beliefs, causes and defines them. Finally, the author goes so far as to suggest that he, and by implication his design work, is derivative of his former master. In other words, Vignelli didn't merely influence the author; the designer gave the author his very voice, and the authors works are in some important sense also Vignelli's.

Artifact-Centered Criticism

Here, I want to talk about a pretty well known essay in design circles: Richard Buchanan's "Declaration by Design: Rhetoric, Argument, and Demonstration in Design Practice," originally written in 1985, and (sadly) only now having a chance to get its message into HCI. I cannot do this article justice here, because it features a multilayered argument about technology and design that is rich beyond what I can do in few paragraphs. So I will stick to its core argument: design is a form of rhetoric.

[R]hetoric is an art of shaping society, changing the course of individuals and communities, and setting patterns for new action.... The primary obstacle to [understanding the design of technology as rhetoric] is the belief that technology is essentially part of science, following all of the same necessities as nature and scientific reasoning. If this is true, technology cannot be part of design rhetoric, except as a preformed message to be decorated and passively transmitted.... However, if technology is in some fundamental sense concerned with the probably rather than the necessary—with the contingencies of practical use and action, rather than the certainties of scientific principle—then it becomes rhetorical in a startling fashion. It becomes an art of deliberation about the issues of practical action.

[Buchanan moves onto the nature of the design argument:] the designer [is] a speaker who fashions a world, however small or large, and invites others to share in it.... This article suggests that the designer, instead of simply making an object or a thing, is actually creating a persuasive argument that comes to life whenever a user considers or uses a product as a means to some end.

In a lengthy and well illustrated and exemplified argument that follows, Buchanan says that a design argument involves “the interrelated qualities of technological reasoning, character, and emotion, all of which provide the substance and form of design communication.” I paraphrase what he means by each of these below. (Incidentally, Buchanan’s division here is adopted fairly literally from Aristotle’s Rhetoric, which comforts me in its familiarity and authority, and concerns me in its, um, not-exactly-up-to-dateness.)

Technological reasoning is both the “how it actually works” of a design (from a spoon to a coffee grinder) to how the design communicates how it works (reveals, obfuscates, simplifies, metaphorically suggests, pseudo-reveals, etc.). A steering wheel gives me a sense of how a car turns, while the meaning of the “Publish” button on this blog software has a more distant relation to what happens behind the scenes when I click it.

Character reflects the designer, or more precisely, how the designer wants to appear in the design. Whether a design is playful, modest, utilitarian, ostentatious, user-friendly, avant-garde, etc., all get at its character. The difference between, say, a BMW and a Volkswagon is not merely a matter of engineering (the technological reasoning), but also the character the cars project on us.

Emotion (or pathos) refers to the way that a design connects to its user. Buchanan here emphasizes movement and lines and the way they beckon a user to touch, interact with, and relate to designs. He explicitly rejects exploitative or “coercive” emotion—such as (these are my examples) pictures of grotesque human corpses as a technique for engaging in the abortion or Iraq war debates. Instead, good designs serve practical human life in emotionally engaging and desirable ways.

Stepping back and looking at Buchanan's argument, he is focusing entirely on design artifacts, claiming that embedded in these artifacts is an internal language that makes an argument to users to partake in its vision of practical life. Certainly, this reflects the intentions of the designer; the sociocultural contexts of design, distribution, and use; and the interpretation and appropriation of the design by its user. But all of these are secondary, in some important sense embedded in and a consequence of the design argument presented by the artifact itself.

User-Centric Approaches

I wrote quite a bit about this in Part 5 of this series. Indeed, I had something of a personal breakthrough, in distinguishing between empirical, historical, actual, flesh-and-blood people as "users," and what I think I'll call the "hermeneutic user," that is, the "user" as a discursive construct created by the critic as a way to explore ways that humans deeply and subjectively respond to the experience of interacting with a design. This hermeneutic user is tied to notions of the "reader" from semiotics, which argues in some sense that a text not only contains "codes" that provide access to its content, but also "codes" that tell one how to be that text's ideal reader.

This is akin to the approach taken by Ann C. Tyler in "Shaping Belief: The Role of Audience in Visual Communication." She begins the piece by saying that she is continuing the rhetoric approach of Buchanan (described just above), but to me, she actually takes it in a different direction. Her essay emphasizes the interpretive process of the viewer of several posters. For example, she describes two 1972 airline travel posters, promoting travel to Asia.

The PanAm images are architectural in nature: the terraced land [of gardens in Bali] forms a contrasting figure/ground pattern; the two people standing with their backs to the audience become shapes against the sky. People and land become objects of beauty. Distanced from the scene through perspective and the lack of any reference back to the viewer, the audience thus remains "outside" a beautiful, tranquil scene. Landscape and people are frozen in time for the audience to view as they choose—as in a museum of artifacts. Both posters promise the audience an esthetic, non-participatory experience if they travel to these distant lands.

The rhythm of Tyler's rhetoric is like that of a tide coming in. Back-and-forth it goes between talking about objective features of the artifact and the response in the viewer. But with each back and forth, it inches ever toward the meaning in the interpretation of the viewer. As I asked in the previous post, just who is this viewer? It is the hermeneutic viewer; she is not talking about a survey of actual viewers but is rather using a hypothetical viewer as a strategy to explicate what the artifacts mean in the phenomenal world of humans that see these posters (as opposed to the posters in-themselves).

Sociocultural-Centered Criticism

This last category is perhaps the broadest. Whereas designer-centered criticism is often biographic, and artifact- and user-centered criticism are often rhetorical or semiotic, sociocultural-centered criticism borrows much from cultural studies, including art criticism, literary criticism, Marxism, feminism, new historicism, and a host of others.

For this section, I'll talk about an essay written by Tony Fry, "A Geography of Power: Design History and Marginality." He begins the essay with a fairly theory-heavy frame:

Design history is understood here as various and competing explanatory models of design. As with other emergent and established forms of institutionalized knowledge and practice, it exists in and produces conditions of marginality. The aim of this paper is to explore such conditions in the context of the rise of design in Australia.

It is not particularly uncommon for sociocultural-centered design criticism to be theory-heavy, given the vastness and sheer complexity of its subject. Obviously, the scope of the semantics of a juicer arm and the that of the entire history and institutionalization of design in Australia are on a different scale. And, to be fair, this article of all of the ones I include in this post is the most theoretical. But it does contain sections of criticism. Here is one of them:

Design, even prior to the management of a design profession, intervened to undercut the formation of a modern Australia as a discordant bricolage. Appropriation [of imported design materials and processes from the United States and Europe] was organized but not within a systemic plan. There was neither total chaos nor directed order but a pragmatic falling together of fragments. The disparate arrival of Ford [Motor Company] and Fordism [the industrial assembly line] is one contained example of this history.

The first Ford car was brought to Australia in 1904. Commercial importing began in 1909 with the Model T. As sales increased, an ad hoc system of distribution became locally established. Because of corrupt and profiteering practices that grew up around this network, the Ford company refused to trade with it and set up its own local administrative and distribution system instead. Ford Australia was formed in 1925. Fordism, however, was an industrial system of mass production based on the in-line assembly of interchangeable parts, arrived in Australia a year earlier. A Sydney-based manufacturer of compressors introduced such a method to its factory in 1924.... Product design and advertised image (the symbolic forms) were drawn from the USA. Here, then, was a mixture of appropriation and imposition, order, disunity, and disorder, and the object (the car, its system of production and distribution, and its symbolic form) as a

sign of modernity. All of this adds up to one example of a local sign of a particular conjuncture and paradigm of modernity—"Americanism and Fordism" in Australia.

In this passage, we are understanding design from the twin lenses of theory and history, focusing on the twenty year period in which Ford and Fordism—which had emerged practically simultaneously in the United States—spills into Australia in non-systematic, non-random ways. The historical circumstances, in this passage, appear to overwhelm the design. In other words, the intentions of any individual designers are so tiny that they don't even register here. The product semantics of the cars and their reception by Australians are also dwarfed by the sheer cultural force of the assembly line and the Model T Ford.

Summary

I hope through these examples my readers, in particular those with scientific backgrounds who are hoping to appropriate more "designerly ways of knowing" (a phrase I keep using that also is the title of a wonderful book), are able to see how criticism both differs from science and yet has its own rigor. Obviously, Tony Fry had to master his history before he could develop his theory and criticism of Australian design history. Buchanan knew his Aristotle and yet had the intellectual creativity to appropriate it for design and make it mean something (not only is his essay great for anyone interested in design, but he also leverages it to offer a compelling argument for designerly approaches to technology). Tyler's comfortable mastery of rhetoric and semiotics, though not explicitly shoved down the reader's throat, is evident in her incisive ability to apply it so fruitfully in her interpretations of graphic designs. And Bierut's reflective and articulate ability to tease out what made both his master's and his own creative sensibilities tick is a model for anyone who wants to understand how designers analyze creativity, a rich mix of personal psychology, philosophy, anecdote, taste, and embodied gesture.

What started as a blog post is turning into a paper. I need to wind this down. I will post some readings here just to conclude it, but it may be a week to ten days before that happens. But the main argument, and my core purpose for beginning this, is, for better or worse, finished here. Thanks for bearing with its length and please share critical comments, because its next iteration will be peer reviewed! (One must make a case for tenure, after all!)

7. Readings: Going Off on Your Own

Acknowledgment: Many of the ideas and readings cited throughout this series and particularly in this post reflect the research and contributions of my colleague and spouse, Shaowen Bardzell.

I certainly have enjoyed composing this series of posts, and I hope to revise it into a paper soon. In the meantime, I have gotten lots of requests for places to start reading, and so this final post in the series I offer some resources for you to explore.

There are two categories of works I will mention here. First, there are works in the field of HCI that take critical perspectives. Second, there are general and introductory works to critical theory and aesthetics.

Critical Approaches to HCI

I will mention a few works in HCI that take critical perspectives. But before I do, I want to take a position. All of the works in this area I am about to cite are inspirations and models to me. While I have various pecky critiques and peeves for each, I love them all and must acknowledge how enormously influential and inspirational they have been to me.

That said, I do not recommend that interaction designers, especially with scientific backgrounds, rely on them to understand how critical theory can interface with HCI in a way sufficient to support critical practice (they're fine, of course, if all one wants is to get a sense for what critical HCI looks like). None of them are introductory works on critical theory, because all of them are original applications of critical theory in the domain of HCI. They may offer some introductory remarks, but these are (appropriately) merely geared to ensure that readers understand the works in question—not to ensure that readers understand critical theory in any nuanced way. But critical theory is all about nuance; none offers an explicit methodology, as it relies instead on the creative intellectual capacity of the critic to make use of the theory to explicate and/or interpret a given phenomenon. Additionally, critical theory has its own history and relationships to the history of art and design, and it loses quite a bit when it is ripped out of that context.

The risk—and one I have seen actualized many times—is that people appropriate critical theories that they have read about in HCI literature in poor ways. They simply don't understand them, and it's obvious to anyone who has had exposure to the theory in question. I don't want to be an elitist at all—I really want our field to make full use of critical theory and (I really mean this) to innovate on it—but at the same time, there have to be some standards with regard to how these are appropriated. Yanking a critical concept willy nilly out of its context because of apparent similarities to the way one already understands something in interaction design is a poor use of critical theory. Critical theory does not exist to confirm what we think, offering a fancy vocabulary to justify us; it is supposed to transform how we think, offering an approach to helping us think the unthought, to have ideas we couldn't have without it.

So, without further ado, here are things I heartily recommend as ways of seeing how critical theory interfaces with HCI, and which I heartily do not recommend as introductions to critical theory. It is not comprehensive. Remember this is just a blog!

- Bardzell, J. & Bardzell, S. Interaction Criticism: A Proposal and Framework for a New Discipline of HCI. In In CHI'08 Extended Abstracts. ACM Press (2008), 2463-2472.
- Bertelsen, O. & Pold, S. Criticism as an Approach to Interface Aesthetics. Proc. of NordiCHI '04, ACM Press (2004). 23-32.

- Blythe, M., Wright, J., McCarthy, J., and Bertelsen O. Theory and method for experience-centered design. Proc. of CHI 2006, ACM Press (2006), 1691-1694.
- Boehner, K., DePaula, R., Dourish, P. & Sengers, P. Affect: From information to interaction. In Bertelsen, O. et al. (eds). Critical Computing—Between sense and sensibility, ACM Press (2005), 59-68.
- Dourish, P. Where the Action Is: The Foundations of Embodied Interaction. MIT Press, Cambridge, MA, USA, 2001.
- Löwgren, J., & Stolterman, S. Thoughtful Interaction Design. MIT Press, 2004.
- McCarthy, J. & Wright, P. Technology as Experience. MIT Press, Cambridge, MA. (2004).
- Sengers, P. and Gaver, B. Staying open to interpretation: Engaging multiple meanings in design and evaluation. Proc. of DIS 2006, ACM Press (2006), 99-108.
- Sengers, P., McCarthy, J., & Dourish, P. Reflective HCI: Articulating an agenda for critical practice. In CHI'06 Extended Abstracts. ACM Press (2006), 1683-1686.
- Udsen, L., & Jørgensen, A. The Aesthetic Turn. Digital Creativity, 16 (4), 205-216.

So I hope that's helpful.

Introductions to Critical and Cultural Theory and Aesthetics

If you want to practice, as opposed to read up on, critical approaches to HCI, then in my opinion, you minimally need to read about critical theory in its original context, which is literary, art, design, and cultural criticism. As noted earlier, I believe this because critical theory is not merely difficult (like all theory) but also because (also like all theory) it emerged in historical contexts, where one theorist was responding to the works of an earlier theorist, or a theorist was elaborating new theory at a time of major political or aesthetic change (e.g., the rise of modernism and the totalitarian state). These contexts matter!

I also recommend that people start with introductory readings. That may sound condescending. You might think, why don't I just go out and read Heidegger or Barthes myself and form my own opinions? You can, but I don't think it's the most efficient way to get a practical, working knowledge of how to use the theory. This is so for many reasons. The main one is that Foucault or Derrida or Bakhtin or whoever wasn't writing in Silicon Valley in 2008 about interaction design, but rather was writing in a different country, in a different historical era, about different stuff. And, by implication, for an audience other than us! That audience is assumed to know all sorts of things that, if you are still reading this post, you probably don't already know. Derrida, for example, wrote assuming that the reader had already mastered (i.e., studied extensively, know the secondary literature on, and have mature, philosophical opinions of one's own on), for example, Heidegger. Of course, to understand Heidegger, you need to have a similar mastery of Husserl, Kant, and

Aristotle. And so on. Most of us aren't in that audience, and that means we'll miss a lot of nuance and significance of what we read.

Introductory books explain the key ideas to serious, intelligent people who don't yet have that mastery. There is no shame in that, and I cite them all the time. My student's edition of what could have been titled "What Foucault Said" has been more influential on me than anything Foucault wrote, and I actually have read the majority of Foucault's writings available in English, right down to interviews and minor essays. Still, that intro book lays out the big picture and offers the framework in which I organize all those writings.

So there are five introductions to literary and critical theory that I am happy to recommend. I even append a brief comment about each, to help you in your selections. Again, this is not a comprehensive or carefully crafted list.

- Peter Barry. *Beginning Theory: An Introduction to Literary and Cultural Theory*. Manchester, UK: Manchester University Press, 1995 (second ed. 2002). I just discovered this one, and I really like it. It does a good job of balancing theoretical concepts with a focus on method, that is, how such and such a concept might affect the way you read. I really wish I had had it as an undergrad.
- Terry Eagleton. *Literary Theory: An Introduction*. Oxford, UK: Blackwell, 1983. This is the classic work that everyone has read, but I actually am not crazy about it as an introduction. (I like it as an original work of theory, though.) My concern is that Eagleton does not really try to fairly represent the core ideas of each theory on their own terms, but rather interprets them on his own terms as he presents. Thus, there is a lot of critique in this book, which itself is great, but it interferes with its introductory capacity, IMHO.
- Raman Selden (Ed.). *The Cambridge History of Literary Criticism: Volume VIII: From Formalism to Poststructuralism*. Cambridge, UK: Cambridge University Press, 1995 (2005). I love this volume, but it may be a little too oriented toward practitioners of literary studies. If you want to take your skills to the next level with key 20th century literary theory, particularly those influenced by linguistics, then this is a good next step. But if you're just starting, I probably wouldn't recommend this one.
- Lois Tyson. *Critical Theory Today: A User-Friendly Guide*. New York: Routledge, 2005. This book delivers on the promise of its title. It introduces all the major schools in very accessible chapters. My favorite feature: every chapter contains a section called "Some Questions ___ Critics Ask About Literary Texts," (the blank is filled with the chapter topic: psychoanalytic, deconstructionist, feminist, etc.). These questions are a fantastic launching point for people first acquainting themselves with these theories who also want to practice using the theories. Love. It.
- Patricia Waugh (Ed.). *Literary Theory and Criticism: An Oxford Guide*. Oxford: Oxford University Press, 2006. This phone book of an anthology covers quite a bit of ground. The chapters I have read have been readable and accessible introductions to the relevant theory—quite impressively so. The

only downside is that some of the chapters introduce, develop, and justify the theoretical concepts without really saying anything about how to apply them. You are supposed to figure that out for yourself (and that's exactly what is expected of trained critics, but those of us outside literary studies might prefer at least a little direction).

So much for the big introductions. I also want to mention aesthetics in this post. One might think that literary/cultural studies and aesthetics would more or less be synonymous. In a sense, they are. But there's also a very significant distinction that's worth mentioning. And I'm going to oversimplify it, but that's too bad. This is a blog.

In the 20th century, there was a split in philosophy, whereby the field broke into two large camps. One was called Analytic, and it emphasized logic and cognition and tended to be practiced in the UK, USA, and Scandinavia. It gave us thinkers such as Carnap, Russell, and Quine. The other group was Continental, and it was primarily French and German, and focused on language, reader reception, and ideology; it gave us thinkers such as Heidegger, Habermas, Foucault, Derrida, and concepts such as postmodernism. These two groups had unpleasant things to say about each other.

The significance for our purposes is that, from what I can tell, people who use terms like literary theory, cultural theory, critical theory, and so on, are generally influenced by Continental philosophy. (Full disclosure: this was my training, and my strength, but I'm no longer a partisan for it—or against it.) In my readings, people who use the term “aesthetics” are more likely to have an Analytic background. And I love their work, even though they say bad things about my French intellectual heroes. There are many introductions to aesthetics as well, but there are two I have read cover-to-cover and wholeheartedly recommend:

- George Dickie. *Introduction to Aesthetics: An Analytic Approach*. Oxford: Oxford University Press, 1997. Dickie is deservedly famous for his institutional theory of art, a brilliantly clear thinker, and a surprisingly concise, accessible writer. How can I possibly improve on that as a recommendation? This book is under 200 pages!
- Gordon Graham. *Philosophy of the Arts: An Introduction to Aesthetics*. New York: Routledge, 1997 (3rd edition 2005). I need to teach more classes so I can make more students read this book! After offering a general theory of art, Graham examines each of the arts (visual arts, literary arts, music, performing arts, architecture, etc.) focusing on two seemingly simple questions: “What is the distinctive value of ___” (where the blank is filled with a given type of art) and “How does ___ direct the mind?” This second question, which at first struck me as a little idiosyncratic, is, in Graham's hands, quite fecund. (It is also bracingly cognitive, but I'll resist further criticism for now.)

Finally, and I really, really need to stop, unless someone is going to give me tenure based on a series of blog posts, I want to direct your attention to a few series that overall I really like, even if individual items in them can be uneven. Basically, and this is true of all four of the series, each volume takes on a single topic, is slender

(usually between 100-200 pages), and written for a serious, but introductory audience. Rather than offering brilliant critique and original thinking, each instead offers a meat-and-potatoes introduction to its topic, based on the present consensus view of that topic. All are well referenced and, from what I have seen, actually written by legitimate experts in the field. So, if after reading some theory you decide you want to get a better handle on Lyotard's critique of twentieth-century scientific thinking, you've got a great next step. Combined, these four series have over 100 volumes. They're totally overpriced, so if someone from Routledge is reading this, now is the time for you to blush. Still, you'll get a lot out of them, so bite the bullet.

- Key Sociologists (series editor Peter Hamilton), published by Routledge. Sample authors: Simmel, Foucault, Weber, Bourdieu.
- Routledge Critical Thinkers: Essential Guides for Literary Studies (series editor Robert Eaglestone), published by Routledge. Sample authors: Barthes, Lyotard, Kristeva, Zizek.
- A Guide for the Perplexed (no specified series editor), published by Continuum. Sample authors: Deleuze, Derrida, Adorno, Levinas.
- A Very Short Introduction (no specified series editor), published by Oxford University Press. Sample topics: Poststructuralism, Barthes, Literary Theory, Kant, Wittgenstein, Russell.

Of course, none of the books in the second half of this post are meant to replace reading the real thing. I certainly would not discourage someone from reading Foucault. But I would strongly discourage interaction designers who do not have a background in the humanities from reading Foucault or Barthes or Bakhtin without also reading some of the introductory literature about Foucault or Barthes or Bakhtin. This will hopefully help prevent the problem of people citing critics where their understanding is actually (and all too obviously) derived from reading about them in HCI literature.

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