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Humanistic HCI

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Insights

- Humanistic approaches often feature or emphasize history and tradition, conceptual analysis, interpretation, and social action.
- Common humanistic HCI practices include interaction criticism, critical discourse analysis, critical social science, design futuring, and emancipatory HCI.
- Humanistic essays are rigorous, but not in the way that scientific reports are; they should be reviewed accordingly.

It is unconventional, perhaps narcissistic, to speak first of ourselves. However, a value of humanistic thought is a reflexive awareness of the conditions of one's own knowing, and also a disclosure to one's audience of who is speaking. Readers should know who is telling this story, for both its strengths and its weaknesses reflect the particular positions from which its authors speak.

Another value of humanistic writing is innovation on the form of academic writing to make a point. More on that later.

ABOUT THE AUTHORS

Jeffrey Bardzell and Shaowen Bardzell are both researchers in human-computer interaction and associate professors

in the Indiana University School of Informatics and Computing. Both earned Ph.D.s in comparative literature.

These two facts alone might explain why we would write an article like this. But those facts in their particulars also shape our vision of humanistic HCI—our sense of its possibilities, responsibilities, and weak spots.

We frame our thinking on humanistic HCI as a dialogue between humanistic (especially literary) practices and HCI (especially in its “third wave”) research. In particular, we focus on aesthetic approaches to user experience, art and literary critical approaches to research through design, and feminist approaches to participatory design.

The humanities, however, also

include law, history, religion, digital art, and media. And HCI includes at least two other waves of research, from GOMS to collaboration in praxis. Our work is less successful at reflecting accomplishments or potentials in these areas. In other words, our account privileges a certain kind of humanities and a certain kind of HCI.

To proceed otherwise is to weaken the very conditions of our knowledge work.

And to fail to disclose our own contingencies to you, our readers, is to speak as if we are all-knowing—that is, to universalize our perspective behind the mask of the Author-God.

THE COMPUTER REACHES OUT

Jonathan Grudin describes a grand narrative of the computer transitioning from a narrow and technical specialist domain to something ubiquitously around us as “the computer reaching out” [1]. Fifty years ago, computers lacked sufficient power to both do their tasks and also render a user interface; instead, human specialists functioned as the interface between a human with a computational need and the system capable of performing it. In subsequent decades, we saw the rise of desktop and then mobile computing, with computers moving into grocery stores, homes, and pockets.

Today, enabled by our smart devices and social media habits, algorithms watch us online, in airports, and via financial transactions. They seek to figure out whether we might be terrorists as well as to predict which kinds of cheese we’re more likely to buy.

HCI reaches out. To cope with the consequences of the computer moving out into the world, HCI has turned to different academic disciplines as resources. Since the early 2000s, these have increasingly included, among others, humanistic theories and practices. The primary underlying

cause, we believe, is that technologies had changed sufficiently—the Internet, mobile computing, and so on—that the field was more or less compelled to look beyond its existing theories and methods for new resources that could support its goals of understanding and supporting new uses of computing and IT design and innovation.

Key examples include the rise of aesthetics as an approach to user experience design [2]; the introduction of “reflective HCI” [3] to reposition the field with a more self-critical stance; as well as the use of feminist [4], queer [5], and postcolonial [6] approaches to emancipatory computing.

The humanities reach in.

We would argue, however, that humanistic HCI has been around for much longer. One of the earliest and most influential examples is Terry Winograd and Fernando Flores’ *Understanding Computers and Cognition* [7]. Their book offered a critique of the “rationalistic tradition” in HCI at the time, showing that the field tacitly embraced theories about rationality, decision making, and cognition that were at odds, Winograd and Flores argued, with many of the key goals of HCI and design. As alternatives, Winograd and Flores introduced Heideggerian phenomenology, biological accounts of cognition and language, and speech act theory to HCI. Offering an epistemological critique of the field as a whole and introducing an alternative epistemological stance are philosophical activities. It is easy to see that Winograd and Flores’s seminal work was in fact humanistic HCI, even if no one at that time was using the term.

Many others followed in the tradition of Winograd and Flores by offering philosophical critiques of prevailing HCI theories, methods, and practices, and it is difficult to

overstate their influence. They include Lucy Suchman’s *Plans and Situated Actions*, Liam Bannon and Susanne Bødker’s 1991 “Beyond the Interface: Encountering Artifacts in Use,” Geoff Cooper and John Bowers’ 1995 “Representing the User,” and many others.

That arc—from Winograd and Flores’ early critique to today’s aesthetic user experience, emancipatory HCI, and design fictions—is the story we tell in *Humanistic HCI* [8], the book this cover story is based on. In distilling a book into a story, we obviously had to make several editorial decisions—how much background is needed, what needs emphasizing, and how do we hope to influence the field?

The following sections offer our answers to these questions. After defining and contextualizing humanistic HCI, we respond in the main part of this essay to the question we are always hearing—“how does one *do* humanistic HCI?”—by introducing several common humanistic methods that have contributed to HCI. We also reflect on the expression of humanistic research—the critical essay—as formally and epistemologically distinct from the scientific report. We conclude with some thoughts on you, our readers, as those responsible for the future of humanistic HCI.

WHAT IS HUMANISTIC HCI?

We understand *humanistic HCI* to refer to any HCI research or practice that deploys humanistic epistemologies (e.g., theories and conceptual systems) and methodologies (e.g., critical analysis of designs, processes, and implementations; historical genealogies; conceptual analysis; emancipatory criticism) in service of HCI processes, theories, methods, agenda setting, and practices. It is not the same as digital humanities, which is humanistic research supported by digital technologies, and which is by and large practiced by humanistic scholars (see, e.g., [9]).

Humanistic HCI operates in the opposite direction: It is HCI research and practice that is supported by humanistic practices, theories, and methods. One need not have a degree in the humanities to practice it, and indeed many of its most prominent practitioners have backgrounds in the

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social sciences or design.

To unpack what it means for HCI to be supported by humanistic approaches, it helps to step back and reflect on the nature and purposes of the humanities.

The social purposes of the humanities. Philosophy, law, history, and the interpretation of the arts have been practiced continuously since antiquity. However, what we recognize today as a more or less stable set of academic fields, canons of works, and intellectual practices is much more recent, forming during the 18th-century Enlightenment and stabilizing in the 19th century [10].

One such Enlightenment concept is that of *liberal humanism*, which is the notion that the arts can serve as the basis to educate and cultivate the free citizens of Western democracies. Although it emerged in the 19th century, the concept remains entrenched today. Consider this 2014 description of the humanities from the United States National Endowment for the Humanities (NEH):

Because democracy demands wisdom, NEH serves and strengthens our republic by promoting excellence in the humanities and conveying the lessons of history to all Americans... The term 'humanities' includes, but is not limited to... the following: language, both modern and classical; linguistics; literature; history; jurisprudence; philosophy; archaeology; comparative religion; ethics; the history, criticism and theory of the arts; those aspects of social sciences which have humanistic content and employ humanistic methods; and the study and application of the humanities to the human environment with particular attention to reflecting our diverse heritage, traditions, and history and to the relevance of the humanities to the current conditions of national life [11].

The humanities' contribution to society, writes Matthew Arnold in 1865, is to "establish an order of ideas, if not absolutely true, yet true by comparison with that which it displaces; to make the best ideas prevail" [12]. These ideas are drawn from history, the arts, and our heritage/traditions, in such a way that they inform the present.

Characteristic features of humanistic practice. Several qualities are common to humanistic knowledge contributions.

History and tradition. Historians of art, politics and world events, language, traditions and rituals, and so forth not only tell us what happened in the past but also segment it, introduce key distinctions, and above all interpret its significance in the present. The purpose of such historical accounts is not to fetishize or preserve the past but rather to enliven our sensitivities to similar patterns in the present and to the

Conceptual analysis. During its rise in the 19th century, science began to displace philosophy as the knowledge discipline best able to account for the world. What was philosophy's role in a scientific era? One answer was that philosophy ceased to provide doctrines and instead became an activity directed at the clarification of thoughts. As the early Ludwig Wittgenstein wrote, "The object of philosophy is the logical clarification

nature of social change.

Having emerged only in the past 40 years, HCI doesn't have the millennia-long histories of literature, painting, or even certain design disciplines, such as fashion. Many HCI systems are presented with little to no reference to their own historical genealogies, and the field itself has no significant histories beyond a generally shared sense that HCI has had three paradigms or waves [13,14]. Yet other design fields—including architecture, product design, graphic design, and fashion design—do have significant histories, and practicing designers know and use them. Our expectation is that interaction design and/or HCI (whatever their relation is or will become, exactly) will develop much more of a historical sensibility in the coming decade.

of thoughts. Philosophy is not a theory but an activity. A philosophical work consists essentially of elucidations" [15]. Philosophy was thus moving away from producing original systems and toward the disciplined analysis of the concepts we think with.

Conceptual analysis has moved to other disciplines, including HCI. Some of the key HCI concepts that have been subjected to conceptual analysis include aesthetics, affect, cognitive models, context, criticality, design implications, probes, reflection, sexuality, space and place, sustainability, and the user.

Interpretation, hermeneutic analysis. People look at Andy Warhol's *Brillo Box* and wonder why it is art at all. A believer wonders how an erotic poem that makes no reference to God found its way into the Bible and how

she is supposed to make sense of it spiritually. The state takes a publisher to court over the purported obscenity of a novel. But is it obscene?

Making headway with any of these situations requires skilled *interpretation*; development and dissemination of that skill is a paradigmatic contribution of the humanities. Political philosopher Charles Taylor defines interpretation as follows:

Interpretation . . . is an attempt to make clear, to make sense of an object of study. This object must, therefore, be . . . in some sense confused, incomplete, cloudy, contradictory—in one way or another unclear. The interpretation attempts to bring to light an underlying coherence or sense [16].

One use of interpretation in HCI has been in experience design, particularly the cultural strand of experience design (e.g., [2,17]). These researchers see that experience itself is the kind of “confused, incomplete, cloudy, contradictory” phenomenon that demands interpretation. Another application is ubiquitous computing, with its interpretative vision of what the future will or should be [18].

Social action. The belief that the arts and humanities serve a higher social purpose has been a main thread of humanistic thinking. The concept of *emancipation* is at the center of much of this work. Emancipation refers to delivery from bondage, and humanists typically take a broad and inclusive view of bondage, ranging from the emancipation of slaves to far more subtle forms of domination, exploitation, and abuse.

Emancipatory thinking is well represented in HCI research and practice. Participatory design has recognized for over four decades that design knowledge is a kind of power that ought to be distributed. Long-recognized gender imbalances with computing are increasingly being

viewed from a political perspective. HCI’s complicity in the exploitation of the Global South is being called into question.

Summary. These four features of humanistic thinking collectively reveal several overall humanistic dispositions: the attempt to take on a situation or work that is in some sense confusing; to do so holistically (rather than analyzed and operationalized into well-defined parts); to bring clarity to it; and to do so in a way that orients itself toward emancipatory change (diversely defined).

HUMANISTIC HCI PRACTICES AND METHODS

We’ve summarized some of the characteristic features of humanistic HCI, but how does one practice it?

Excursus: The expert subject.

Before we answer that question, we’ll make a short digression to talk about *who* does humanistic HCI. In traditional science, knowledge work strives for the ideal of objectivity. This epistemological virtue seeks to bracket out conflicts arising from the subjectivity of the scientist (e.g., the desire for fame/financial gain or dogmatic commitment to a theory) and seeks to add tight linkages between verifiable evidence and inferences drawn from it. In such a view, the word *subjective* takes on a derogatory tone.

However, there are forms of scholarly rigor that *require* subjectivity. To some, the phrase “subjective scholarship” might seem self-contradictory. Yet this reflects a confusion between different forms of subjectivity, in particular the difference between mere opinion and expert subjective judgments.

A can’t persuade B that one flavor of ice cream tastes better than another. Yet if A claims that a Garry Winogrand street photograph is superior to a common snapshot, B can expect A to offer reasons to defend this claim.

And under certain circumstances, B might be persuaded—because there *can* be good reasons to support such a claim. Reasons might include those based on recognized photographic qualities (e.g., composition, technical excellence such as focus and exposure, and capturing something especially insightful about a scene, perhaps its “decisive moment”). As the Winogrand example suggests, some subjects are better than others at producing judgments. *National Geographic* doesn’t ask a random person on the street (or 500 of them via a survey) which photo to put on its cover; such a decision is left to a panel of experts.

Designers are also expert subjects [19]. Designers are hired not because they are objective and neutral, nor because they represent the common everyperson, but precisely because they have distinctive ways of seeing and doing their work; they have mastery of and within a recognized profession; they have a designerly *voice*.

The five approaches we summarize below all depend in key ways on the expert subjectivity of the practitioner.

Interaction criticism. A common activity in design processes is to collect exemplars relevant to the current design project and to critically analyze these designs for insights, inspirations, formal and material considerations, and other forms of problem framing.

The research analogue of this is design criticism [20,21]. Design criticism entails close “readings” of interaction designs, not unlike the way scholars in the traditional humanities offer close readings of literary, painted, musical, or dance works.

Philosopher of art Noël Carroll defines aesthetic criticism as follows:

For me, the primary function of the critic is not to eviscerate artworks. Rather, I hypothesize that the audience typically looks to critics for assistance in discovering the value to be had from the works under review . . . [T]he primary function of criticism is to enable readers to find the value that the critic believes that the work possesses [22].

Many of our colleagues seem to believe that criticism is fundamentally negative. Yet we agree with Carroll that criticism is above all a positive practice, a *reasoned yet personal search for value* that seeks to

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reach out and engage others on the basis of that value.

We understand *design criticism* as referring to rigorous interpretive interrogations of the complex relationships between (a) designs broadly construed to include both processes and products, including their material and perceptual qualities as well as their broader situatedness in cultural styles and conventions; and (b) user experiences, which include the meanings, behaviors, perceptions, affects, insights, and social sensibilities that arise in the context of interaction and its outcomes.

Finding that value can be difficult: We often feel captivated, intrigued, or emotionally drained yet have a hard time explaining why. Humanistic HCI researchers have sought to suggest humanistic approaches as sensitizing frameworks, as “ways in” to finding resonant aspects of designs and user experiences. Such frameworks have focused on design materials, genres, and styles; intertextuality and remediation; enrichment of our capacities of perception, imagination, and insight; qualities of interaction; and socio-historical contexts, among others (see, e.g., [20,21,23]).

Outcomes of this work, in addition to facilitating the creative exploration of particular design domains, have included revealing the capacities of digital interaction as a medium, exploring emancipatory potentials of design, theorizing the roles of materials and embodied perception as epistemological resources of and in design processes, and explicating relationships between design choices and experiential qualities.

Critical discourse analysis.

Research unfolds in communities engaged in a diverse yet also broadly coherent inquiry practice, with shared blind spots, assumptions, and other weaknesses, the discovery of which can lead to significant changes in research agendas. The problem, of course, is being able to see the blind spots in the first place.

One technique is the critique of HCI as scientific discourse. In one form of such critique, known as “critical discourse analysis” [24], researchers collect a large set of papers, usually intended to comprehensively cover a subdomain of the field. This set of papers is then analytically fixed

as the corpus. Relying on a theory of discourse, researchers then typically deploy a fixed set of explicit procedures to analyze that corpus. Its primary objective is disclosing tendencies of the corpus as a whole, with the intention of demonstrating its often hidden epistemic or ideological limitations. HCI examples of such critiques include studies of cultural probes [25], affective computing [26], and sustainable making [27].

Critical social science. We often hear the sciences and humanities characterized as if they are incommensurate with one another. Yet the humanities and the social sciences have long traditions of working together. For example, critical theory has shaped qualitative social science methods while scientific research in linguistics and neurosciences have influenced the philosophy of art and literary theory.

Similar blendings are occurring in HCI. For example, Mark Blythe and Paul Cairns offer side-by-side social scientific and critical-interpretative analyses on the same data and then compare them [28]. Their dataset is derived from YouTube user comments about the release of the then-new iPhone. The authors explain their methodology in traditional social scientific terms, explaining the data population as a whole and how they arrived at their sample. They explain their use of grounded theory to arrive at an account of what YouTube users were saying about the iPhone: amateur reviews, demos and hacks, unboxing, advertisements, reporting on launch day queues, and satires of iPhone mania.

But then the article pivots. In a section called “Limitations of social science-based approaches,” the authors observe that their analysis has given them a good sense for typical responses to the iPhone, but note that there is another category of response that is “puzzling,” one that their qualitative analysis has given them less insight into. These are responses that have such “a surplus of meaning” that their meaning isn’t straightforward, such as a viral video called “Will It Blend?” in which a man in a lab coat destroys a brand-new iPhone in a blender.

Using the theories of critical theorist Slavoj Žižek as a springboard,

the authors offer a critical analysis of the video, using abduction to interpret how it achieves its comic effects. For example, the authors offer a critical genealogy of the man’s persona, linking him to educational science films, sitcom and game-show soundtracks from the 1950s and ’60s, television advertisements, and incongruous juxtapositions. Underlying all of this, the authors claim, is the cultural logic of consumerism and society’s ambivalence to it—that we understand how marketing manipulates us and yet we really want the latest gadgets anyway. By critically interrogating a symbol (the iPhone in a blender) of a symbol (the iPhone as fetish object) of a symbol (consumerism and its social costs), the authors offer an analysis that complements, but does not replace and could not be replaced by, qualitative social science.

Design futuring. IT designers often design for/toward a future not far off, one that is plausible and even likely, but different from our present-day mundane reality: Ubiquitous computing, smart cities, the Internet of Things, and wearable computing are all examples. Such designers must confront the limits of human capacity to look beyond individual technologies, which come and go, and improve their ability to imagine desirable futures that can be made possible through technologies.

We have seen two strategies at work in design futuring with a humanistic bent:

- To fabricate fictional prototypes from the near future in diverse media, which embody near-present materials, infrastructures, and capabilities using present-day design methods in ways that push present understandings and conventions

- To deploy and/or exhibit such prototypes to help researchers/designers and also users/public think critically and holistically about sociotechnical possibilities of the near future to inform debate and to gather momentum for (or against) agendas.

These strategies are commonly deployed in speculative design, critical design, design fictions, and science and utopian fiction. As HCI research on futuring has shown, the above two strategies are typically intertwined and supported by a range of specific

tactics, including the following:

- The construction of what-if scenarios—using any combination of designs and fictions—as prompts for reflection and dialogue [29]
- The use of a fully realized fictional character as perspective through which to view technosocial change [18,30,31]
- The invention of new words, neologisms, portmanteaus, and so forth as a way of disrupting everyday language’s role in limiting our imagination [31]
- Treating undesirable or unorthodox uses and behaviors as paradigmatic of an alternative way of being worthy of exploration [5]
- Critical re-readings of scientific texts and especially design scenarios supported by literary theory [30,31].

Common to all of this is a critical relationship between a prompt and some viewer (the designer, the researcher, the public) such that the prompt helps the viewer move beyond the mundane familiar and into a more critical and imaginative space.

Emancipatory HCI. Identifying and creating emancipatory openings are a fundamental goal of virtually all humanistic HCI. A classic example is participatory design (PD), which emerged 40 years ago in connection with the Scandinavian labor movement. Computing systems were increasingly shaping professional workplaces and workflows, and yet those with the most immediately at stake in their design—the workers—had little say in their development. PD sought to involve a much more diverse set of stakeholders directly in the design process. It also sought to decenter expertise, such that everyone involved offered some form of expertise and had the obligation to learn from the expertise of others—designers, workers, domain experts, managers. Such an approach, it was believed, would lead to more useful

systems and higher buy-in.

Perhaps because of its openly emancipatory agenda and legacy in the Scandinavian labor movement, PD has also been open to criticism for failing to live up to that legacy. Liam Bannon and Pelle Ehn [32] suggest that PD has been depoliticized and defanged into mere user-centered design. Similarly, Ann Light [33] observes that the fact of participation alone is not sufficient to address the politics of design: Designers often unilaterally frame the project and invite participants in, which she refers to as a “benign imposition.” More recently, Shaowen Bardzell [34] observes that while PD has clearly been influenced by critical theory and political criticism, the influence can flow in the opposite direction: PD could be used as a methodology to pursue feminist activism/inquiry. Doing so, she argues, would add participatory design—its democratic processes, its ability to alter physical and social ecologies, its capacities to grant and constrain agency—to the activist’s methodological toolkit.

Common to design futuring and emancipatory design is the fusing of the humanistic use of critique as speculation with design activities. Doing so enables HCI researchers and practitioners to interpretively explore alternate worlds, to discover the possible and the preferable in them [29], and to construct both pathways and the collective will to pursue them [30].

Summary. The five approaches described here are obviously not comprehensive, but there are unities underlying their variety—in particular, the role of the expert subject, who uses theory in a sensitizing way to expose, imagine, or construe significances and opportunities otherwise hidden from view in the objects and discourses that structure the everyday lives and

activities of design professionals and the general public alike.

But humanistic research does not end with such approaches. We think it is also extremely important to focus on the *expression* of this research as scholarship. We do so in part because we believe that, as a field, we do not yet fully grasp the relationships between the epistemological commitments and the form of the essay, and how in that relationship humanistic rigor is exposed—all of which have major implications for peer review.

WRITING AND REVIEWING HUMANISTIC HCI

The form of scholarly expression—scientific report, philosophical treatise, critical essay—is not mere convention. It shapes how researchers motivate, give shape to, account for the methods of, and provide evidence for their research contributions. It reflects the relations among the speaking scholar, her scholarly readership, and the nature of the intellectual contribution.

The scientific report. HCI’s dominant mode of expression is the scientific report, which has a common structure (intro, lit review, methods, results, findings, etc.). The scientific report is a fit for scientific thinking because it embraces the aesthetics of clarity, directness, and transparency, which are crucial to presentations of new data and inferences concerning their significance. It demands its writer to systematically articulate the logical structure of the research project (e.g., the fit between the research hypothesis and methods) in a transparent way.

The report also accommodates different levels of attention, from a careful read to a quick skim. Its skimmability is manifested in descriptive (rather than poetic) titles and headings, the presence of an abstract, and its predictable structure. Skimmability encourages researchers to access a very high number of relevant papers, facilitating an overview awareness of the state of the art as well as decisions about which papers to read more carefully. That said, if one wants to read a scientific report with a very high level of care, its commitments to transparency and disclosure support such usage. The scientific report also

Whereas a scientific report is structured to demand consent, essays are more likely to demand a thoughtful response, engagement, reflection—but not necessarily (or even likely) agreement.

has the benefit of being a relatively easy template to use as a writer, which is important in a global discipline where leading researchers often are not native speakers of English, and where findings are prioritized over expressiveness.

All these observations explain why the traditional social scientific template is a fit: It structurally provides the information required to express, find, evaluate, and learn from the writeup in accordance with the highest scientific standards.

The humanistic essay. The successful humanistic essay, though profoundly different from a scientific report in its structure, style, and contribution, nonetheless also demonstrates a strong pragmatic fit between its discursive form and the rigor and appropriateness of the research it expresses. Common formal features of essays include a unique structure, poetic/evocative titles, no abstract, and sparse headings. So how is the essay an appropriate format for a humanistic contribution?

Essayist and essay theorist Philip Lopate [35] claims that the act of writing itself often serves as the medium of a writer's thinking; the essayist is not reporting knowledge gained through prior acts, but in some senses is constructing the knowledge in the act of writing. The essay has two key features: It reveals a *process of thinking* and it is *shaped and crafted* as a work of writing. The two go hand in hand. Lopate writes of the essay that it “tracks a person’s thoughts as he or she tries to work out some mental knot, however various its strands. An essay is a search to find out what one thinks about something” [35]. And the essay-as-search is also a form of dialogue: “Readers must feel included in a true conversation, allowed to follow through mental processes of contradiction and digression, yet be aware of a formal shapeliness developing simultaneously underneath” [35].

Thus, rather than reporting a truth already discovered, as presented in the standard scientific report, the essay can instead be seen as “enacting the struggle for truth in full view” [35]. The essay thus discloses, rather than represses, the inquirer as a subject with a point of view performing the inquiry right before our eyes.

In sum, the author of the essay has a distinctive *voice*, that of the expert subject we described earlier, someone who has mastered the domain, but who also speaks subjectively of her or his own experiences and processes of thinking. Structurally, essays are fluid and idiosyncratic; it would be all but impossible to present the common structure in a bullet list. What structure is there is *crafted* (Lopate frequently uses the metaphor

Abowd offers doubts and uncertainties and acknowledges the fallibility of his predictions. We would add this essay could only have been written by someone of Abowd’s stature; this type of argument demands a publicly recognizable expert subject as its speaker. But in spite of this paper’s overt subjectivity, fallibility, and uncertainty, none of the reviewers presumably asked the author to come back in 10 years once he had

of “shaping” and “shapeliness”); there is a literary quality to the essay. Let us turn now to HCI and consider an essay by Gregory Abowd entitled “What Next, Ubicomp? Celebrating an Intellectual Disappearing Act” [36], published at the annual Ubiquitous Computing conference. In this piece, Abowd—one of the most influential researchers in ubiquitous computing—proposes that ubicomp should be abandoned. His reason is not that it has failed, but that it has become so wildly successful that it has effectively become “all computing,” and the reason for treating it as a niche area has dissolved in that success.

There are several essayistic qualities of this piece. It is structurally *sui generis*. Abowd liberally refers to himself as “I” and addresses his reader directly as “you” at several points.

more data on whether ubicomp did in fact disappear. They saw that his contribution was a position that challenged the field in that moment, not a “result” offering data about the “true” state of ubicomp.

Reviewing HCI essays. Given the epistemological commitments of humanistic writing and the ways they are reflected in the medium of the essay, we believe there are important implications for peer reviewing. Whereas a scientific report is structured to demand consent from its reader (e.g., through its providing of evidence, which has been rigorously collected and narrowly interpreted), essays are more likely to demand a thoughtful response, engagement, reflection—but not necessarily (or even likely) agreement. That is, the essay invites us to change how we think

about a domain. This does not require proof so much as provocation that is hard to dismiss (even if one is inclined to disagree with it). It demands that the reader try it out, think it through herself.

We propose, as an alternative to the standard questions when peer reviewing a scientific report, that reviewers of essays in HCI consider the following criteria. When we review humanistic submissions, we should begin with the *position-as-contribution*. Now, a *position* is not merely a proposition; instead, it holistically comprises an expert subjective voice, a theoretical-methodological stance, its own situatedness within a domain, a pragmatic purpose, and one or more propositions. To understand the position, and to assess its contribution to the research dialogue, we propose that reviewers consider the following range of questions:

- *What is the purpose of the position?* Does it work out a new idea, shed new light on a familiar example, or shift the debate in some way?
- *What are the effects or consequences of the position?* Does this position force the reader to clarify or iterate on her own position(s)? Does it provoke the reader to want to try it out?
- *What or who is the voice offering this stance?* Who is the expert-subject speaker inscribed in the essay? Is that voice coherent, honest, and internally consistent?
- *What are the theoretical and methodological substrates of the position?* Do they merely determine the position, or do they serve as a launching pad for creative and original thinking?
- *Does this meet humanistic standards of rigor?* Does the work demonstrate insight, imagination, perceptiveness, sensitivity? Is there evidence of mastery of the domain? Does the essay communicate its own conditions of knowledge production?

THE COMPUTER PUSHED OUT

Earlier we referenced Grudin's narrative of "the computer reaching out" [1]. But we in HCI are not just passively "being reached" by the computer. It is our profession that, along with others', *pushes* the computer out. It is an abdication of our own moral agency to say otherwise. We believe that humanistic theories and approaches, emerging out of and reflecting the values we have been describing—of critical thinking, communicative competence, imaginative empathy, reflective self-awareness, and so on—not only can help HCI researchers and practitioners live up to their own utilitarian, ethical, and aesthetic ideals, but also that they already have.

Nonetheless, our concern, based on our experiences as researchers doing humanistic HCI—characterized by a mix of triumphs and screw-ups—is that humanistic HCI remains a little bit mysterious, inchoate, undetermined. How, for example, can HCI mesh social-scientific and humanistic methodologies? How do HCI researchers write about such projects? Who will review them and based on which criteria? The answers to these questions are in your hands.

ABOUT THE READERS

We began this essay with some comments about who we are and where we came from. We'll conclude with some comments about you as a member of the HCI community and (presumably) interested in humanistic approaches to the field. Many who have done humanistic HCI in the past have written as if they were lone wolves. Yet what we are seeing is the emergence of a community of humanistic HCI practice. Such a community, once formed, will have enough in common that we all can understand and build on each other in a constructive way. Our hope as authors of the present work is that it contributes toward such a community.

Members of this community of practice don't all have to agree with each other, of course. But like any such community, there must be some underlying coherence to that practice. As a start, we propose that coherence looks something like this:

- Mastery of the key *concepts* we discussed in this essay (and more comprehensively in the book): interpretation, subjectivity and the expert subject, judgment, aesthetics, poetics, holism, emancipation, reflexivity, canons, ideology, discourse, forms of life, false pleasures, the hermeneutics of suspicion, etc.
- Facility with key humanistic *methodologies* or inquiry practices: critique, genealogy, conceptual analysis, discourse analysis, hermeneutics of suspicion, speculation, *explication de texte*—all guided but not determined by an intelligent and judicious use of critical theory
- Cultivated *sensibility* for objects and ideas: sensitivity, insight, provocativeness, originality, perceptiveness, empathy, taste, the generous yet critical reading of others, domain mastery, and a developed capacity for appreciation
- Excellence in *expression*: crafted and shapely writing, honesty (especially with regard to the struggle for truth or meaning), a coherent and distinctive voice, and positionality (i.e., not speaking with the voice from nowhere).

HCI researchers and practitioners without advanced training in the humanities can learn and use humanistic ideas and approaches in their work. In an interdisciplinary field, this is to be welcomed and should be systematically supported (e.g., within graduate education).

We expect that humanistic approaches will improve their ability to partner with all of HCI to take on problems or opportunities of an ambitious scale, to reframe or revitalize stale research and design agendas, to keep the field honest and reflective, and to help all of us imagine better futures and better forms of life that are worthy of the whole field's tremendous collective gifts and energies—and more important, worthy of our "users" (pretty much everyone now) and their children's children.

Such, anyway, is our aspirational biography of you.

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