CHAPTER 2

What is Humanistic HCI?

To answer the question of what is humanistic HCI, we first take a step backward to consider the question, what are the humanities? Now, we assume that all of our readers have taken humanities courses at various points in their careers, that they are critical thinkers who are widely read, and that they already have a fairly sophisticated understanding of the humanities based on their own experiences. So it might seem needlessly pedantic to spend part of this short book introducing a topic that readers already know.

But we have several reasons for beginning with this question. Above all, we want to direct readers’ understanding of the humanities into a relation to HCI. To do so, we want to offer an analytic (rather than intuitive and experiential) account of the humanities. A more analytic account has the benefits of allowing us to explicate relations between humanist and scientific approaches to knowledge and also to pull forward a set of themes that we will refer to throughout the book, which animate humanistic HCI. Creating this analytic account necessarily requires us to make choices about major categories, theories, historical contexts, and disciplinary boundaries, and to help us with this task, lest it be idiosyncratic, we will want the humanities to speak for themselves, so we will quote generously so readers can see how humanists account for their own practices.

Once we have our account of the humanities, we return to the question of what is humanistic HCI, offering a formulation of the term and exploring some of its consequences. In particular, we will consider what the term ends up including and excluding to assess whether the results fit with our expectations and understandings.

2.1 WHAT ARE THE HUMANITIES?

The humanities is an umbrella term that today is used to refer collectively to a range of academic fields or disciplines, including art history, classics, cultural studies, film studies, languages, law, literature, media studies, philosophy, religion, women’s studies, and so on. The humanities are also associated with a range of key concepts, including humanism, the arts, critical theory, and culture. Beginning in the last century through the present, the humanities have come under heavy fire from outside and from within, for being tied to traditions that are either irrelevant, because we’ve moved beyond them, or politically regressive and therefore dangerous. We will survey all of these issues in the following pages, again with an eye toward HCI where appropriate, beginning with the social rationale for the humanities as we understand them today.
2. WHAT IS HUMANISTIC HCI?

2.1.1 THE SOCIETAL CONTRIBUTION OF THE HUMANITIES

Humanistic practices have been around since the pre-Socratics in the west, and philosophy, literature, law, and the fine arts have been practiced continuously ever since. 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. Our concept of “the fine arts”—a concept that unifies painting, sculpture, architecture, music, and poetry under a single concept (Art) and intellectual field (aesthetics)—dates only back to the 18th century (Kristeller, 2008). Liberal humanism itself—the notion that the arts can serve as the basis to educate and cultivate the free citizens of Western democracies—emerged in the 19th century. The first English departments in the United Kingdom started in the late 1820s, though it would take nearly another century before Oxford and Cambridge would have one (Barry, 2002). F.D. Maurice, Professor at King’s College (which later would become part of London University), argued in 1840 that the study of English would “emancipate us … from the notions and habits which are peculiar to our own age” and would instead connect us to “what is fixed and enduring” (quoted in Barry, 2002, p. 13). The goal here, clearly an Enlightenment goal, is to move beyond our immediate context to connect to the universal.

In 1865, Matthew Arnold, the cultural critic and “founding father of modern criticism in the English-speaking world” (Trilling, cited in Leitch, 2001, p. 802), wrote a seminal essay called “The Function of Criticism at the Present Time” (Arnold, 2010, [1865]). In it, he would characterize “the critical power” as serving the following social purposes:

- 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…. [T]o keep man from a self-satisfaction which is retarding and vulgarising, to lead him toward perfection, by making his mind dwell upon what is excellent in itself, and the absolute beauty and fitness of things…. [And to answer the question,] what will nourish us in growth toward perfection? (pp. 809, 816, 825).

As Peter Barry (2002) comments,

You can see from [Arnold] that the study of English literature is being seen as a kind of substitute for religion. It was well known that attendance at church below middle-class level was very patchy. The worry was that the lower class would feel that they had no stake in the country and, having no religion to teach them morality and restraint, they would rebel and something like the French Revolution would take place. (p. 13)

It is interesting to note the contrast in tone and social agenda in Arnold’s words and in Barry analyzing Arnold. For Arnold, criticism and liberal humanism are emancipatory, helping man [sic] elevate himself out of barbarity and pursue excellence in himself and greatness in his surroundings. For Barry, this agenda was in fact used as a mechanism to get the lower classes to buy into the status quo, thereby decreasing the chance of revolution. This tension—do the arts and humanities
emancipate or are they subtle tools of oppression—remains debated today. Our view is that these options are not exclusive, that is, that the arts and humanities, as institutionalized and practiced today, can have both emancipatory and oppressive effects.

At any rate, the modern humanities are founded on a theory of the individual, one in which individuals can be cultivated “toward perfection” through access to the best ideas. A professional class is needed to identify which ideas were the best and to make those ideas accessible to the masses, which is the job of the critic or humanist to perform.

What we see in these nineteenth-century formulations is a concept of enlightenment—that humanities-informed engagement with the arts and sciences enlightens individuals, that is, brings us to transcend ourselves and moves us closer to perfection; and a parallel concept of society—that by giving all individuals a stake in their nation (i.e., their Englishness) the social order can thereby be protected from revolutions. There is no question, at least at the level of Maurice’s or Arnold’s explicit intentions, of cynically hoodwinking the masses into docility to maintain economic domination over them; rather, there is the optimistic hope that through universal education, defined as a carefully curated and explanatory access to the finest English (and later universal) ideas, the whole nation can be raised up.

This 19th century vision in some ways seems quaint today. And yet, the core commitment to individual enlightenment as a wellspring of a good society remains entrenched even now. Consider this 2014 description of the humanities from the United States’ most significant federal funding source for the humanities, the 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 study and interpretation of 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 (http://www.neh.gov/about, accessed August 16, 2014).

The notion of a republic depends on the wisdom of citizens, and the humanities are a national mechanism for ensuring that collective wisdom, with studies of what it means to be human conducted with a special focus on (in this case) American traditions, history, and national life. Here the NEH is embracing a view very close to that of Matthew Arnold, as discussed above. One could, of course, also argue that a U.S. government-funded humanistic agency also has the ulterior motive of building lower and middle class buy-in to its own regime.
While the humanities have, as we have mentioned, come under considerable fire in the past half century, it is not hard to find old school humanists still around expressing those values. One of the most notable is Harold Bloom, perhaps the most highly regarded literary critic of our times, a Yale professor whose dozens of books have deeply influenced academic and non-academic audiences alike. In a series of books, *The Western Canon* (1994), *How to Read and Why* (2000), and *Where Shall Wisdom Be Found?* (2004), he passionately defends the traditional humanities against its critics. He affirms the Arnoldian notion that literature is enlightening but expands Arnold’s “good citizens make a good country” argument into an argument that reading brings us more fully in line with our humanity. Here is a selection of quotes from the Introduction of Bloom’s *How to Read and Why* (2000):

> It matters, if individuals are to retain any capacity to form their own judgments and opinions, that they continue to read for themselves…. Ultimately we read … in order to strengthen the self, and to learn its authentic interests…. To read human sentiments in human language you must be able to read humanly, with all of you. (pp. 21–22, 28)

> We read deeply for varied reasons, most of them familiar: that we cannot know enough people profoundly enough; that we need to know ourselves better; that we require knowledge, not just of self and others, but of the way things are. Yet the strongest, most authentic motive for deep reading of the now much-abused traditional canon is the search for difficult pleasure. I am not exactly an erotics-of-reading purveyor, and a pleasurable difficulty seems to me a plausible definition of the Sublime, but a higher pleasure remains the reader’s quest. There is a reader’s Sublime, and it seems the only secular transcendence we can ever attain, except for the even more precarious transcendence we call “falling in love.” I urge you to find what truly comes near you, that can be used for weighing and considering. Read deeply, not to believe, not to accept, not to contradict, but to learn to share in that one nature that writes and reads. (pp. 28–29)

For Bloom, reading is not about the transmission of great ideas (for that would foreground believing, accepting, or contradicting), but rather is about an almost Platonic participation in the form of (literate) human nature, a participation that is marked by acts of weighing and considering, that is, critical judgment.

From the standpoint of its social value, the humanities effectively rests on a double argument. The first part of the argument says that all individuals can become better or worse, can be ennobled or degraded, can become enlightened or remain in ignorance; that contact with the finest human ideas, expressed in artistic and scientific works, will do this work of education and enlightenment; and that this is valuable work to do because the growth and stability of democratic society depends on it. The second part of the argument says that it is the job of the humanities to serve this purpose,
which it does by identifying what the best ideas are, and then by removing barriers to their public appreciation in the works in which they are found (e.g., a work of Shakespeare).

There are several criticisms of this formulation of the social value of the humanities, which we will get to shortly, but we note that after decades of attacks, the humanities, in a formulation like this, are making a comeback. Part of the reason for that comeback, we argue, is that not just nations, but science itself (including HCI!) depends on the best ideas enjoying wide currency, both within scientific practices and in the public at-large, which, after all, is expected both to fund scientific research and education and to supply universities with intellectually curious freshmen.

Speaking generally, we are inclined to argue that humanistic HCI can be seen to serve the sorts of social purposes outlined here. For example, humanistic pushback has occurred in HCI at times when the field appears to degrade users, e.g., by rendering them as mere “disembodied ratiocinators” in Bannon and Bødker’s (1991) memorable phrase, or as “a fragile beast under threat from technology” as Cooper and Bowers (1995) put it—both seminal essays calling for and contributing toward a kind of intellectual reform in HCI. The humanist stance also sees a link between the cultivation or enlightenment of the individual and the betterment of society or human nature, which is often expressed as a political and emancipatory stance. That is, if a good society is founded on the enlightenment of its citizens, then it follows that a society that has oppressed or degraded citizens is problematic. In this regard, HCI contributions informed by critical theory, feminism, and postcolonialism have shown how the design of technologies participates in oppression and degradation, e.g., of women, of racial minorities, of citizens of the global south, etc., both harming individuals qua users and society at-large in the process. Moving toward a more meta stance, when HCI seems to be committing itself to theoretical and methodological perspectives that are problematic, humanistic HCI has used conceptual analysis to expose weaknesses and create opportunities to introduce alternative conceptual frameworks for the field (e.g., Winograd and Flores, 1986; Boehner et al., 2005; Harrison and Dourish, 1996; Erickson and McDonald, 2008; Moggridge, 2007). Of course, science has its own mechanisms for theoretical and methodological redirection, but the use in the above cases of both philosophical methods (e.g., conceptual analysis) and philosophical concept systems (e.g., Heideggerian phenomenology) has a distinctly humanistic character, even if it unfolded within and for a scientific research context. In short, not only has humanistic HCI shaped HCI, but it has done so in recognizably humanistic terms.

### 2.1.2 CHARACTERISTIC FEATURES OF HUMANISTIC PRACTICE

There are several features that are common, if not universal, to humanistic knowledge contributions. In this section we discuss how the humanities contribute to our ability to learn from history and tradition, the central role of critical interpretation in humanistic thought, the intentional intermingling of social activism and knowledge production, and the humanities’ contributions toward the
development, clarification, and justification of concepts. As we will show in the main body of this book, each of these is carried forward into humanistic HCI.

**History and Tradition**

It is thanks to art history, for example, that we have a historical narrative of art; that we can distinguish among impressionism, neo-impressionism, post-impressionism, and expressionism based on qualities intrinsic and extrinsic to individual works; that we can defend judgments about art works, artists, and artistic innovations; and that we can explain the social benefits and even market values of individual works. Languages are also important: a scholar of French literature who couldn’t read French, or a classicist who didn’t know Greek or Latin is a contradiction in terms. Even when a humanist is attacking tradition, as often happens, it is inconceivable that the humanist wouldn’t know it intimately. Thus, it is easy to find literary scholars denouncing the patriarchy of the Western canon, but impossible to find any literary scholars that haven’t read extensively from that canon; indeed, a scholar of English literature who hadn’t read Shakespeare is also a contradiction in terms. It is by means of the humanities that “the lessons of history” that the NEH builds itself around are available at all.

In short, one of the services of the humanities is to offer historical accounts, including articulations of important past events and also narratives of artistic traditions and canons—not to fetishize or preserve the past but to enliven our sensitivities to the present and to the nature of social change (e.g., how quickly it unfolds, how it is rationalized, what its long-term effects are viewed in hindsight). These contribute to a systematic reconstruction of the available knowledge and background of the original act of creation and/or audience for a given work: language, styles, genres, sociocultural and historical details, knowledge of what they would have available as background knowledge or readings, etc. This makes possible the interpretation of individual works in relation to traditions and canons. It also not surprisingly gives rise to criticisms, revisions, and defenses of historical accounts, traditions, and canons.

HCI is an interesting field with regard to history and tradition. Having emerged only in the last 40 years, it 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 (Bødker, 2006; Harrison et al., 2007; Rogers, 2012). 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.
Interpretation, Hermeneutic Analysis

The objects of inquiry of the humanities are complexly layered and defy simple understanding. We look at Andy Warhol’s *Brillo Box* and wonder why it is art at all. A high school curriculum planner needs to justify why *Hamlet* is better for 9th graders than *Richard II*. A believer wonders how an erotic poem that makes no reference to God found its way into the Hebrew scriptures and how she is supposed to make sense of it spiritually. A college student watches a classic movie and wonders what all the fuss was about. 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*, and the development and dissemination of that skill is a paradigm contribution of the humanities.

### Interpretation

Interpretation is a word with a wide range of applications, and accordingly it can be difficult to define. Below, we offer two major formulations of “interpretation” to provide some cognitive handles on this slippery term. The first addresses why we interpret and what interpretation achieves. The second addresses the mechanisms of interpretation—what we do when we interpret.

One is that of political philosopher Charles Taylor, who writes:

> 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. This means that any science that can be called [interpretative] … must be dealing with one or another of the confusingly interrelated forms of meaning. (*Taylor, 1971*, p. 6)

The other is from aesthetic philosopher Noël Carroll, who characterizes interpretation in relation to works of art:

> Interpretation … goes beyond the given in order to establish the significance of what has been given. Interpretation is concerned with significance—for instance the thematic significance or the narrative significance of an artwork or the significance of the behavior of a character in a fiction or the interrogation of the import of a metaphor […]. Typically, interpretation involves the process of abduction—hypothesizing from the various parts of an artwork to the theme or message or idea or concept that best explains why the assemblage of parts before us coheres together as a whole […]. Interpretation aims at excavating the sense of the work. (*Carroll, 2009*, p. 110)
The humanities have contributed to this goal in three basic ways: interpretations of particular works, which remove barriers to their appreciation or comprehension; the development of frameworks and theories of reading (e.g., close reading, reader-response theory, the New Criticism, psychoanalysis, and deconstruction); and the development of justificatory accounts of interpretative theories, that is, metacriticism.

The most conspicuous application of interpretation in HCI has been in experience design, particularly the cultural strand of experience design (Blythe et al., 2003; McCarthy and Wright, 2004; Sengers and Gaver, 2006), Höök, 2010; Pace et al., 2010, among others). This strand of research has argued that usability measures are insufficient to characterize experience in sufficient rich or broad terms, especially given the move of computing to all parts of everyday life. Experience itself is the kind of “confused, incomplete, cloudy, contradictory” phenomenon that demands interpretation, which includes the users interpreting their own experiences with technology as well as researchers interpreting technological experiences.

Additionally, interpretation has come up in other areas of HCI. Ubiquitous computing research is vision-driven, that is, underlyng the possibility of ubicomp research is an interpretative vision of what the future will or should or could be like (Weiser, 1991; Bell and Dourish, 2007; Rogers, 2006; Bardzell and Bardzell, 2014; Blythe, 2014). Aesthetic interaction is another area where skilled acts of interpretation have been foregrounded (e.g., Bertelsen and Pold, 2004; Löwgren, 2006; Bardzell, 2011). Humanities-supported interpretations have also had significant impacts on HCI4D (Irani et al., 2010), games and play (Nardi, 2010; Fernaeus, 2012), self-expression and identity (Akah and Bardzell, 2010; Tanenbaum et al., 2012).

Social Action

With the exceptions of movements such as art-for-art’s-sake decadence and postmodern skepticism, 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. The latter would include the abuse of one’s own body to fit patriarchal norms of feminine beauty (in the case of anorexia), or making fun of lower class accents as a way to reinforce social class distinctions.

As we discuss in Chapter 6, Marxism, psychoanalysis, feminism, and postcolonialism are all emancipatory perspectives and approaches. Each focuses on a different formulation of a hegemonic status quo, analyzing its tactics of self-perpetuation, and analyzing and/or proposing tactics of resistance.
• **Marxism** analyzes the ways that capitalism establishes an exploitative system of labor, economic production, and wealth distribution and then embeds it in a self-reinforcing way of life that seems both natural and inevitable.

• **Psychoanalysis** posits profound conflicts between our embodied selves with instinctive drives on the one hand and our social selves subjected to a common language and heavily codified way of life.

• **Feminism** considers how biological sex is interpreted and performed as socially constructed gender norms, which are themselves exploitative and seemingly natural and inevitable.

• **Postcolonialism** focuses on the ways that Western culture unilaterally establishes the Middle East as a homogenous cultural “other,” failing to recognize how the diverse peoples of the region understand themselves or even letting them speak for themselves on the matter. This cultural other is then used to justify the West’s ongoing political, economic, cultural, intellectual, and military engagements in the region.

These kinds of emancipatory critiques are well represented across many areas of HCI research and practice. The computer’s “reaching out” has touched much of the planet: it’s in our bedrooms, in our pockets, in diverse societies across the globe, and so forth. For those of us who research and design systems, it’s easy enough to see that we have social power. Whether we want it or not, we have the power to inscribe social norms, gender roles, everyday practical assumptions into technologies—and we do. The idea that “user needs come first,” when the power to understand and interpret “user needs” is unilaterally (self-)granted to Western scientists, is colonial. That “the user” lacks gender, that is, that HCI is “gender blind,” flies directly in the face of the core value proposition that feminists bring to the table. That the planned obsolescence baked into Apple’s environmentally disastrous business model seems perfectly natural and reasonable is a function of capitalist hegemony. HCI researchers are leveraging the concept systems and critical interpretative methods of the humanities both to expose HCI’s complicity in practices of domination and oppression while seeking to develop alternative HCI theories and methods to combat them.

**Conceptual Analysis**

Around the turn of the twentieth century, it was clear that science had risen as the privileged form of knowledge production, eclipsing other knowledge disciplines, including the humanities. This development put considerable pressure on the prior center of all intellectual knowledge, philosophy: What was philosophy’s role in a scientific era? Did science eliminate the need for philosophy? Or was philosophy to serve in a secondary role, serving as a handmaiden to science? Perhaps philoso-
2. WHAT IS HUMANISTIC HCI?

Philosophy needed to become more scientific. It was a lively period for philosophy and the first part of the twentieth century burgeoned with new ideas about the relations between philosophy and science, and a two-part answer was developed, which in many ways is still with us today.

The two-part answer is to identify what philosophy is and to situate it in relation to science. One thing was clear and that is what philosophy is not: a discipline that can give us doctrines about how the world is (science had preempted that role). Instead, philosophy became an activity directed at the clarification of thoughts, as the early Wittgenstein wrote in this passage from his *Tractatus Logico-Philosophicus*:

> The object of philosophy is the logical clarification of thoughts.

Philosophy is not a theory but an activity.

A philosophical work consists essentially of elucidations.

The result of philosophy is not a number of “philosophical propositions”, but to make propositions clear.

Philosophy should make clear and delimit sharply the thoughts which otherwise are, as it were, opaque and blurred. (*1999 [1922], Section 4.112*)

Or as Bertrand Russell put it,

> The business of philosophy, as I conceive it, is essentially that of logical analysis, followed by logical synthesis … The most important part [of philosophy] consists in criticizing and clarifying notions which are apt to be regarded as fundamental and accept uncritically. (cited in Glock, 2008, p. 6)

This philosophical activity had two components for Rudolf Carnap, one positive and the other negative: “Negatively, it reveals metaphysical nonsense. Positively, it turns into the ‘logic of science’, namely the linguistic analysis or explication of scientific propositions, concepts and methods” (*Glock, 2008, p. 141*).

Philosophy was thus moving away from producing original systems, as Aristotle had done, and which seemed now to be quaint dogmas, grand pronouncements, and metaphysical nonsense, and toward the disciplined analysis of the concepts we use to think with, and “we” in this case refers to everyday citizens, philosophers, and scientists alike. Thus, if scientists use a concept uncritically, it is the job of the philosopher to step in and offer a conceptual (or logical or linguistic) analysis and set the scientist on stronger conceptual footing. “Philosophy, in fact, is the activity whereby the meaning of statements is established or discovered,” Glock writes. “Philosophy elucidates propositions, science verifies them. … Even this separation is not feasible, and that the definition of concepts is part and parcel of the work of unified science” (*2008, pp. 135–6*). Another role for the
philosopher is to investigate those aspects of reality that are not understandable using the methods of empirical science (see Glock, 2008, p. 135). In these ways, philosophy retains a distinctive role in knowledge production, one that cooperates with rather than competes against science.

We have already written in the Introduction of how works considered seminal in HCI, such as Winograd and Flores (1986), Cooper and Bowers (1995), Harrison and Dourish (1996), and others can be described as doing conceptual analysis. That is, they offer an analysis of how HCI researchers use a concept, critiquing its shortcomings, and proposing better alternatives, many of which themselves are drawn from elsewhere in philosophy. Some of the key HCI concepts that have been analyzed in this way include aesthetics, affect, cognitive models, context, criticality, design implications, probes, reflection, sexuality, space and place, sustainability, and the user. In Chapter 3, we will return to conceptual analysis in HCI, but suffice it to say for now that many of these works have had tremendous influence on the field.

2.1.3 AGAINST THE HUMANITIES

Even as the humanities flourished in the 20th century, they also came under considerable attack, both from without and from within. But we will argue that none of the attacks is decisive, as each has its own limitations and confounds. These attacks, and the sorts of responses they prompt, in many ways shape the humanities today, and humanistic HCI carries forward hallmarks of these debates.

Scientism: An Attack from Without

The primary attack from without is that relic of logical positivism known as scientism. It is a doctrine like scientism that makes philosophical writings and literary speculations seem like “metaphysical nonsense” in the first place, because they involve neither the discovery of new facts nor the derivation of propositions based on facts. The prestige of science, and with it the dominance of a theory of knowledge based on “facts” has dominated Western intellectual circles since the late nineteenth century, and HCI has in many ways inherited that preference. See, for example, how Noam Tractinsky categorically dismisses over two millennia of thinking about aesthetics in favor of scientific data collection to construct a new theory of visual aesthetics in HCI (Tractinsky, 2012). Similarly, we’ve heard anecdotally from humanistic HCI researchers in industry that a common response to their contributions is, “that’s interesting, but where’s the data?”—a common way that scientism manifests itself in everyday professional discourse.

Scientism

Scientism is “the doctrine that only the methods of the natural sciences give rise to knowledge,” that is, “only the factual propositions of science are empirically verifiable and hence that only the propositions of science are cognitively meaningful” (Stroll, 2000, pp. 1, 68).
There are two fundamental problems with scientism, for all of its entrenchment in Western knowledge discourse and industry. First, because there is no empirical fact or set of empirical facts that does or even could justify scientism, it is on its own terms “metaphysical nonsense” and “dogma.” Indeed this led philosophers of science sympathetic to scientism, such as W.V.O. Quine (1951), ultimately to dismantle logical positivism and reconstruct science in terms of a “post-positivism” that seeks to preserve the strengths of empirical science without its dogmas, and in doing so re-opens the door to a positive, albeit limited, role for philosophy and the humanities. Second, as Frankfurt School critical theorists were quick to point out, if knowledge is strictly limited to facts, and since facts can only be present or past, then it stands to reason that knowledge must be forever backward-looking and thus regressive (How, 2003), an argument repeated in McCarthy and Wright’s *Technology as Experience* (2004). But if the goal is to transform society, to emancipate citizens, then knowledge should be a forward-looking enterprise, and scientism narrowly construed simply cannot get us there. Because design is also intrinsically a forward-looking enterprise, it follows that scientism, narrowly construed, offers a problematically limited epistemic basis for design.

**Politics and Postmodern Skepticism: Attacks from Within**

The humanities have also been attacked from within. Two attacks in particular have had extraordinary influence in the humanities: the neo-Marxist political attack on the regressive underpinnings and effects of liberal humanism in spite of itself, and the postmodern attack on the ability of language to tell us anything about the world at all (i.e., an extreme form of skepticism).

We begin with the political critique. One common type of argument is that “the canon” of great works and books on which the humanities depends was constructed during a time of aristocratic control of the social world, and that even after the decline of the aristocratic world, the canon “has retained its self-image as the aristocracy of texts” (Guillory, cited in Freedman, 2000, p. 358). This has led to a political split on the canon: the view from the right is that works in the canon represent the most timeless and most noble accomplishments humankind has ever created (Harold Bloom, although often fiercely critical of the right, does defend the canon on these terms). The view from the left is that works in the canon represent the values and norms of dominant social classes, are used to marginalize alternative ways of life, and therefore should be opened up to be more inclusive of works by marginalized groups, such as women, indigenous peoples, racial minorities, and so forth.
Canons

The notion of “the canon” in a given field is the corpus of works that meet some combination of the following criteria: they are the best works in the tradition; they best represent styles, movements, or themes in a given cultural moment; everyone in the field is expected to master them; they reflect what is most commonly taught.

- The Western literary canon typically includes Homer, the Bible, Virgil, Dante, Cervantes, Montaigne, Shakespeare, Goethe, Whitman, Proust, Joyce, etc.
- The Western fine arts canon typically includes Leonardo da Vinci, Michelangelo, Velázquez, Rembrandt, Monet, Kandinski, Pollack, etc.
- The Western philosophy canon typically includes Plato, Aristotle, Descartes, Hegel, Marx, Nietzsche, Wittgenstein, Heidegger, etc.

Canons are always contentious, always subject to change, as different constituencies seek to influence what is taught and/or regarded as the best or most important. However, in the 1970s and 1980s the very idea of canons came under heavy attack.

But John Guillory (1995), an English literature scholar who focuses on the history and sociology of the discipline, sets aside both views and asks instead what the canon does. His answer is that the canon historically has been used to teach literacy, that is, when teaching children grammar, “great books” are used as models. But the written word that literate children learn in school evolves far more slowly than the oral word that they speak in everyday life. Out of this tension, a third dialect emerges, one that mediates between contemporary oral usage and “high” written usage; this third dialect is seen as “proper” usage. The point, though, is that only those with formal schooling are able to speak this “proper” dialect; as Guillory writes, “Since the eighteenth century the social stratification of speech has corresponded roughly with the level of class” (p. 242). Thus, the entire institutional apparatus of the humanities—its schools, its canons of works, its theoretical and methodological apparatus, and its pedagogical goals—can be seen as serving and maintaining class stratification and social domination. This could hardly be further from the aspirations expressed by Matthew Arnold in the 19th century and Harold Bloom at the beginning of the 21st, which embrace a universal emancipation through difficult but rewarding encounters with great works.

This political critique is impossible to dismiss, but it’s also not without problems of its own. One problem with the political view is that it tacitly posits that there is a body of canon-legislators who decide by fiat what counts as canonical (Lamarque, 2008). Yet we know no such body exists, and, moreover, we have some idea of who does make these decisions in an ongoing and hardly coordinated way: schoolteachers, about which works they teach; curators, theater managers, and editors,
about which works they present to the public; and authors, artists, and other creative individuals, who make decisions about which prior works they want to take on and rework. One can retort that all of these groups fit within a system of institutions (universities, schools, policymakers, public museums) and are themselves members of a higher social class, which is true. Yet the “West’s greatest writers are subversive of all values, both ours and their own…. If we read the Western Canon in order to form our social, political, or personal moral values, I firmly believe we will become monsters of selfishness and exploitation” (Bloom, 1994, p. 28). And as Arthur Danto once noted, the history of art and the history of censorship cannot be understood without the other. If aristocrats were using literature as a tool of domination, they seem to have made some very eccentric choices.

Another objection is that the political view makes it impossible to establish any notion of aesthetic value, since the category itself becomes suspect. Yet few dispute that some works offer more aesthetic value than others. If that is the case, then it follows that some professional practice is needed to make and defend such judgments, and these judgments will need criteria, which, whatever its limitations, old-fashioned liberal humanism provides: there are cognitive, spiritual, and/or moral benefits to the serious study of the arts, which enlightens and emancipates individuals, and which at sufficient scale leads to a better society.

The other internal attack on humanism comes from postmodernism, and the details of its argument are quite technical, based on a combination of post-Kantian epistemology further developed by Nietzsche and post-Saussurian linguistic theory. The gist of the attack—and Jacques Derrida’s “deconstruction” and Michel Foucault’s “archaeology of knowledge” are central theory-methods here—is to question the very possibility of any connection between language (e.g., of science, social policy, philosophy, literary arts) and the world. Once these core assumptions are taken away, what remains is a relational notion of meaning, in which words come to be meaningful as a result of the relationships (e.g., institutional, oppositional, complimentary, hierarchical relationships) that they enter into with other words. Yet these relationships are neither bounded nor stable, and an analyst can “deconstruct” the ways that words enter into these relationships. This in turn opens up the possibility of imagining or inventing new kinds of relations, which in turn can reveal new ways of being and thinking, which then, according to this theory, supports emancipation. On this view, liberal humanism is another construct that, once pressed, cannot hold itself together and loses any coherence. Thus, whereas the neo-Marxist views the liberal humanist as well intentioned but ultimately regressive, the postmodernist reviews the liberal humanist as incoherent and senseless.

Postmodernism has gone on quite a ride, but there is an emerging consensus, which began to gain momentum in the 1990s, that its heyday is past. From the start, it faced accusations that it leads to relativism, which its proponents fiercely denied but which nonetheless dogged this line of thinking. For feminists, for example, who were drawn to his account of power, Foucault’s postmodernism was frustrating because even as it could function as a powerful critique of institutions, knowledge, and social domination, at the same time and for the same reasons it seemed also to pull
the rug out from under the possibility of activism (McLaren, 2002). That is, if power is so pervasive and systemic, then if feminism can exist at all, it’s because the system of power can accommodate it, meaning that feminism must be always already toothless. Indeed, the toothlessness of emancipatory academic agendas has become a topic of concern within the humanities. Bruno Latour laments that postmodern critique has become a tool of the right wing, enabling it to relativize scientific debates about, for example, climate change by dismantling the binary between science and pseudoscience (Latour, 2004). Marxist literary critic Terry Eagleton observes that decades after the heyday of emancipatory theory the whole movement seems to have achieved very little (Eagleton, 2004). Another concern is that postmodern thought is too textual: it treats everything—art works, institutions, power, human bodies, etc.—as “texts,” with the result that it is comparatively weak on issues of embodiment that are central to any form of activism as well as for design.

Many of the debates just summarized are also active in HCI. Are HCI’s emancipatory agendas toothless? As we summarize in Chapter 6, Paul Dourish (2010) suggests that much of HCI’s work on sustainability effectively puts the onus of responsibility on individuals and obfuscates corporate and government responsibility—effectively preempting many of the most important questions and contributing to toothlessness. How about canons? As the HCI community continues to stabilize as a field, a certain set of examples tend to bubble up time and again, e.g., VisiCalc, Spotfire, Tangible Bits, Drift Table, etc. It is likely that these are constituents of an emerging canon, bringing with it all of the benefits (e.g., community-wide shared exemplars) and disadvantages (e.g., aristocratic tendencies) of canons. Finally, the risk of scientism is more subtle; we see it as hindering, for example, the theoretical and methodological development of research through design, critical design, and so on, as many in the community appear to feel a need to legitimize their processes and outcomes according to the rhetorics and virtues of science. We also see scientism as hindering constructive discussion between psychology-based and humanistic conceptualizations of user experience, as we discuss in Chapter 5.

2.1.4 FINAL THOUGHTS ON THE HUMANITIES

We have devoted considerable space in this chapter to an account of the humanities. In a predominantly scientific discipline such as HCI, it is understandable that an appreciation for humanistic research contributions, social value, and intellectual integrity or rigor can be elusive. As Yvonne Rogers writes in her contribution to the Synthesis Lectures on Human-Centered Informatics (Rogers, 2012, p. 72):

What this means in practice, is to understand HCI from a number of different angles, such as “linguistic, ideological, gender-based, institutional, environmental” and to develop multi-faceted knowledge constructs that are, “diverse, complex, intentional, subconscious, implicit, genealogically layered, ideological, linguistic and ritually structured—all at once”
2. WHAT IS HUMANISTIC HCI?

(Bardzell, 2009). This seems like an art form and skill set that takes much to practice to develop and hone…. For those unfamiliar with this form of multi-layering and interpretative position, it can appear daunting and unwieldy.

Here, Rogers uses one of our earlier papers to express the multi-layered complexity of the humanities. It is true that in this book, as in elsewhere, we want to recognize that humanistic approaches confront their objects of inquiry in their complexity, rather than atomistically as is common in science (i.e., by breaking down a complex concept into ever-smaller and more tractable sub-concepts, for example, by dividing “experience” into “need fulfillment,” “positive affect,” and “hedonic quality,” with further subcomponents and operational measures for each of those). But the last thing we want is to mystify the humanities or make their practices seem impossibly complicated. In fact, there are shared social objectives, theoretical stances, hermeneutic methods, and objects of inquiry that make the humanities coherent as a practice; they are teachable, which brings people into that practice; and they are evaluable in terms of rigor.

By way of summarizing this section, here are some of those shared commitments. What follows is an optimistic picture, but it should be understood as constituting the core normative goals of most humanists, rather than a description of actual achievements; science could likewise be accounted for by relating its intended contributions to society vs. actual consequences.

The humanities, through their underlying humanism are primarily committed to the improvement of thinking, including the cultivation of our abilities of perception, imagination, discernment, conceptual clarity, intellectual coherence, and judgment. This knowledge goal is distinct from the knowledge goal that drives the sciences, namely the expansion of existing knowledge through the discovery of new facts. Of course, the humanities also discover new facts, and science is likewise deeply concerned with the improvement of thinking; the difference is one of emphasis.

The improvement of thinking, enacted collectively by a citizenship or population, is believed to be emancipatory, because it exposes forms of injustice and reveals more just alternatives that people are able to work toward individually and collectively, and it reveals alternative forms of life as viable and even desirable. The humanistic improvement of thinking is also enlightening, because individuals have access to a great and diverse repertoire of ideas, ways of life, and the tools to weigh and to judge their inevitable conflicts and contradictions, which helps them perceive their own situations empathically and imaginatively. An enlightened and emancipated public leads to a better society, which is more stable because it is more just.

The improvement of thinking is achieved through diverse activities, some of which we have summarized. These include critical and historical accounts of tradition, with objectives of collecting humanity’s best ideas and achievements and also keeping in our consciousness our worst ideas and crimes, to serve as a resource for the present. It includes the practice and theorization of interpretation, because real life practices, including science, policymaking, parenting, and citizen-
ship all depend on it. It holds itself directly accountable for its contributions toward (or against) emancipation and social justice; that is, in contrast to the scientific normative goal of objectivity in service of truth, humanists generally commit to a normative goal of justice and right action, which necessarily unfolds within subjective agency, which the humanist seeks to maximize. This is where reflexivity enters the picture, and our account of attacks on humanism shows that the attacks from within are more compelling and harder to defend against than the attacks from without. Finally, we talked about the role of conceptual analysis, which exists not only in analytic philosophy, but which also unfolds in aesthetic critique (e.g., using Milton’s Satan in *Paradise Lost* to analyze concepts of rebellion or using Botticelli’s *Primavera* to contribute historical genealogies of the concept of feminine perfection).

Humanistic HCI is research or practice within HCI that inherits a critical mass of these commitments and practices. Let us now turn to what that has meant and what it could mean.

### 2.2 WHAT IS HUMANISTIC HCI?

This term, “humanistic HCI,” is not used in the field in any sort of formalized or coordinated way, and the majority of writings we summarize in this book as comprising humanistic HCI do not use the term at all. Now, as the authors of a book called *Humanistic HCI*, we feel considerable pressure both to define the term (which seems like the least we can do for readers) and also to be able to provide excellent criteria by which to decide which works to include in the book, which ones to emphasize, and how to articulate their significance as humanistic HCI.

As humanists ourselves, we are also well aware of the dangers of proposing any such definition. We’ve read enough philosophy to be certain that we would fail to provide an adequate definition—no one has yet offered satisfactory necessary and sufficient conditions for important concepts, such as art. We’ve read enough emancipatory theory to have absolute confidence that whatever we come up with will be political, overvaluing some contributions and undervaluing others, in a way that makes it even harder to rectify afterwards. As evidence of these problems were the disputes (occasionally heated) that the two of us had about which works to include, how to handle borderline cases, and so forth. What do we do with significant HCI research that seriously engages traditionally humanistic concepts but in a distinctively non-humanistic way, such as Tractinsky’s work on aesthetic interaction? Or a design research project using a healthy injection of humanistic thinking to support it, as is often the case of Dunne and Raby’s work?

We came up with the following, which we have already cited in our Introduction.

Humanistic HCI refers 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.

We view this as a candidate or working definition. That is, we doubt that this is a final or adequate definition, but we do believe it is sufficient for our immediate need to determine what to include vs. exclude, what to emphasize and what to treat as borderline, in this book. But there are bigger issues as well: we hope that this book helps consolidate and build momentum for humanistic HCI. To do that, we will have to communicate something to readers that they can get behind, identify with, and take forward. We also hope that this book helps community members make good decisions, say, about when, whether, and how to take up humanistic approaches in their HCI research and practice; and also to support good decision-making in the all important peer review process. For these reasons, we have decided to share the criteria we came up with to help us decide what counts as, what exemplifies, humanistic HCI.

Guiding our criteria for inclusion as humanistic are the following criteria, the presence of each of which motivates toward inclusion but by itself does not guarantee it. We stress that each of these is offered descriptively, but not normatively; that is, the presence or absence of any of these criteria in a research or design product makes it more or less easy to identify as “humanistic,” but it does not in itself make it more or less easy to identify as “good.”

- The research is in a traditionally humanistic domain of inquiry, such as aesthetic experience, ethics, hermeneutics, law, history or tradition, and philosophy.

- It considers its objects of inquiry holistically, rather than atomistically. For example, it views user experience as a holistic phenomenon to be critically interpreted (e.g., McCarthy and Wright, 2004), rather than a complex structure that can be analytically decomposed into measurable parts (e.g., Hassenzahl, 2010).

- It relies on traditionally humanistic methodologies, including critical analysis, interpretation, history/genealogy, conceptual exploration and analysis, and mastery of relevant canons and commentaries.

- It relies on and/or develops one or more mainstream humanistic theories (e.g., Deweyan experience, reader-response theory, Heideggerian phenomenology, psychoanalysis, Foucauldian identity theory) in a central or substantial way.

- It embraces the humanist stance of expert subjectivity over that of scientific objectivity. Philosopher Stanley Cavell (2002) characterizes the serious interpreter or critic of art as seeking to master, rather than bracket aside, her subjectivity, a position fundamental to hermeneutics (Gadamer, 1975) and also put forward in HCI by Greenberg and Buxton (2008).
• The paper, book, or article and/or one or more of the authors self-identifies as a humanist work or researcher. For example, Christine Satchell’s (2008) CHI paper, “Cultural Theory and Real World Design” explicitly calls itself cultural theory.

Each of the above motivates for what we count as humanistic.

There is also the question of whether or not the work is HCI. Guiding our criteria for inclusion as HCI are the following criteria, again which motivate toward but does not guarantee inclusion.

• It addresses its primary claims/contribution to the HCI community, heavily references HCI research/practice as its research base, and/or explicitly claims to speak from within HCI.

• It addresses itself to specific problems that are focal points of the HCI community, including research on use and users and the design of interactive systems.

• The research is published in a venue institutionally recognized as doing HCI, such as ACM SIGCHI, ToCHI, Interacting with Computers, CSCW, DIS, TEI, Creativity and Cognition, NordiCHI, OzCHI, HCII, British HCI, etc.

To be humanistic HCI, then, is to meet a critical mass of both of the above sets of criteria. Again, deciding whether a work is humanistic HCI is an interpretative judgment, and indeed we as authors had numerous disagreements about what to count (one of us tended to be more inclusive and the other to be more exclusive). Neither do we expect our readers to agree with us completely about where we ended up. What is important is not asserting some abstract ontological fixed point; what is important is to be able to grasp the phenomenon well enough to get on with what one is doing. In our case, we had to decide what to include and what to emphasize in this book, and so we developed these criteria for doing so. The community also faces similar pragmatic situations all the time, e.g., when choosing peer reviewers for a submission, when deciding which evaluative criteria are appropriate for peer review, when seeking to ensure representation of different perspectives at a grant evaluation panel. These are not arid philosophical hypotheticals, but rather practical issues that professionals in this community deal with on an everyday basis.

In addition to dealing with the practical problem we had in deciding what to include in this book, this activity also helped with another practical problem, which is to distinguish humanistic HCI from digital humanities, science and technology studies (STS), game studies, and third wave HCI, all of which seem to overlap humanistic HCI in certain ways. Simply, our sense is that digital humanities, STS, and game studies are not humanistic HCI, because they are institutionally and discursively distinguished from HCI (on all sides), and (at least for the purposes of this book) our scope of inquiry is humanistic research or practice within HCI. For example, digital humanities refers to humanistic research that is mediated by digital technologies, including archiving humanistic
work, developing toolkits to support humanistic analysis of art, literature, documents, and law, etc. (Berry, 2012). Although there are clearly HCI-relevant issues in such work, most of our colleagues who self-identify with digital humanities do not publish in HCI venues, use common HCI research methods or theories, or even read HCI research. Now, there are many important exceptions where STS and DH styles of knowledge production and research outcomes have made contributions to HCI, and our intention is not at all to legislate let alone police any boundary; rather, we are reflecting what we believe is a relevant distinction among the research communities themselves.

To summarize, the notion we are putting forward of humanistic HCI in this book is intended to be descriptive and not normative; it is meant to reflect meaningful distinctions available in relevant research discourses; it is intended to be provisional and we expect and hope it will be superseded; it is intended to support practical decisions. These practical decisions include the following: which works do we (or might the community) recognize as exemplary of humanistic HCI; whom an editor or paper chair should invite as appropriate peer reviewers; which peer reviewing criteria are appropriate for a submission; and above all how to generate buy-in and identification with a movement within HCI to take it forward into the future, without freezing the topic in a way that inhibits growth or discourages researchers and practitioners on the edges from joining the party.
CHAPTER 3

Humanistic HCI and Methods

Methods play a central role in all knowledge disciplines, including the humanities. But the nature and meaning of the concept of methods differs between the humanities and the sciences. We both completed Ph.D.s in Comparative Literature, and in our experiences theories and methods were not well distinguished from each other. Further, methods—often called “approaches” or “tactics”—were typically not well formalized, to leave room for creative adapting for the research and specific object(s) of inquiry in question. In contrast, in the sciences, methodologies are crucial to ensuring the rigor and legitimacy of inquiry, and many of them are formalized to a high degree (e.g., content analysis). The apparently different attitudes toward methods in the sciences and humanities is a case of important but relatively surface differences masking some equally important underlying similarities; both are disciplined approaches to inquiry and knowledge production, have forms and standards of rigor, theories and methods, research products, benefits to society, and so forth. We believe that for an interdisciplinary field like HCI, with researchers and practitioners of diverse disciplinary backgrounds and predilections, it’s worth disentangling these issues to help scientists and humanists in HCI communicate to each other.

3.1 METHODS AND THE SUBJECTS AND OBJECTS OF INQUIRY

A geologist collects data about the behaviors of the earth—earthquakes and volcanoes, the movement of tectonic plates, the chemical compositions of different geological materials, and so forth. An education researcher collects data about first grade reading outcomes based on a diverse set of pre- and post-grade measures, data about which teaching methods were used, data about the demographic composition of the students, and data about the school’s prior year performance. A medieval historian pores through archives to collect facts about the early origins of what would become the modern university system in twelfth-century Parisian church schools, while collecting socio-economic data, data concerning ecclesiastical labor at the time, evidence concerning literacy rates, as well as contemporary or subsequent accounts/perspectives on this event. The geologist, education researcher, and medieval historian all analyze and interpret what they have collected, set in relation to existing knowledge in the discipline, which could include any combination of theory (e.g., tectonic plate theory), policy (e.g., education policy), and domain knowledge (e.g., knowledge of 12th-century schooling in Paris). Typically, this knowledge contribution is expressed in writing,