The Ideology of Modernism in HCI

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Abstract

I describe initial thoughts towards an ideological analysis of HCI, based on identifying the central role of modernist ideology in HCI research practice.

Keywords

Ideology, modernism, critical theory

ACM Classification Keywords

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

In this paper, I hope to make two main points. First, I aim to describe how a specific conception of ideology can function as a useful lens through which to frame the design and use of technical artifacts for criticaltheoretic approaches to HCI, especially for approaches that aim to illuminate the category of "experience." Second, I will argue that a specific ideology, an ideology of modernism, is key for understanding current HCI approaches to design, as well as the uptake of design in users' lives. These thoughts are the first steps towards a larger project rethinking the role of modernism in technology design.

Ideology, experience, and IT

The notion of 'ideology' for critical theory has its primary roots in Marxist theory [15]. In classical

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Marxist theory, ideology is conceived of as "false consciousness," a prism of ideas which hides the actual, material realities of existence and thereby serves to support the ruling classes. "Ideologies" are therefore falsehoods which classical Marxism aims to reveal and replace with true, scientific knowledge. In this work, I draw instead on later conceptions of ideology from the work of Gramsci [8] and Althusser [2], who see ideology not as a lie to be uncovered, but as an essential part of human existence. In this frame, "ideologies" are organized and communally shared sets of ideas which people draw on to make sense of their existence. They are neither "true" nor "false;" their primary purpose is to provide lenses of meaningmaking which help people to make sense of the chaotic life-world and to guide decisions about what they should do. Stealing a line from St. Paul, Althusser suggests that ideology is omnipresent: it is in ideology that "we live, move, and have our being." [2]

In this strand of theorization, ideology is not a "false consciousness" to be eradicated but an essential part of human practice with political force in the world. Ideology, in this line of thinking, goes hand in hand with experience; it becomes real by becoming part of an individual's consciousness, influencing his or her actions, and thereby becoming part of material practice. It is for this reason that individual experience, which is fairly irrelevant to classical Marxism, is politically valenced in this line of thought. By becoming part of an individual's worldview, ideologies become naturalized as ways of experiencing the world, and thereby are adopted as subjectpositions. When they become part of a concrete individual's consciousness, they influence that individual's actions, thereby moving from the realm of

the ideal to the real. Another way to put this is that individual consciousness (or as we might say in the world of HCI, experience) is where ideology gets legs in the world. To summarize, the notion of ideology I draw from sees ideology as (1) the interface between cultural norms and individual consciousness, (2) without 'right' or 'wrong' but nevertheless politically valenced, and (3) inevitably tied up with individual experience.

Given this notion of ideology, the work of ideological analysis is therefore to uncover the frames of collective thought that shape individual action, not to debunk them but to make them accessible for critical reflection. In my own work, I have found two dimensions of ideological analysis key to reflection on the design and use of IT.

First, we need analysis of the ideological stances taken by individual researchers in the construction of IT. This involves (among other things) analyzing how designers, consciously or unconsciously, frame the "problems" of IT and their "solutions." So, for example, in the world of persuasive sustainability, the "problem" of sustainable HCI tends to be framed as users making incorrect choices with respect to behaviors that affect the environment, while the proposed "solution" tends to be understood as technologies that monitor users' behavior and either influence them to make a correct choice, where the correct choice is generally determined by the technology's designer [6]. Ideological analysis reveals that this problem framing embodies a series of political commitments about who determines what behaviors are acceptable, how users should relate to the authority of technology, and what role technology should play in solving societal problems. These political commitments are then

worked out in the technologies developed in persuasive technology, and to the extent that they are widely adopted have a broader impact in the world. Ideological analysis, in an of itself, does not reveal whether such political commitments are right or wrong, but opens the possibility for identification of and debate around such commitments, rather than having them be propagated without discussion.

Generally speaking, issues around the politics of HCI methods and the ways they are embodied in ideologies of HCI practice can be unpacked through epistemological analyses of HCI methodologies, which examine the stakes involved in particular ways of framing how HCI knowledge could or should be generated (e.g. [4][9][10]). Looking at epistemological issues through the lens of ideology reminds us of two key facts. The first is that there are political stakes involved in the constitution of forms of knowledge production, in the case of HCI research including political decisions about the relative roles of users, designers, and technologies. The second is that questions around knowledge production are not simply intellectual issues that are neutrally debated but everyday, common-sense practices constituted through researchers' on-the-ground experiences and through those experiences becoming obvious, natural, and often unquestioned ways of looking at the world.

A second set of issues for ideological analysis revolve around the question of how and in how far designed technologies may embody and advocate for particular ideological positions to be taken up by users. In terms of 'experience,' we can think of this as technologies offering or enabling specific kinds of experiences which may subtly encourage specific forms of ideological positioning. Given that HCI research has been pushing more towards a notion of "experience design" in which designers are thought to be responsible for shaping user experience, the political stakes of such an enterprise are made clear by the intimate ties between experience and politics suggested by an ideological lens.

Nevertheless, it is complex to determine how to evaluate the extent to which designed technologies can and do push particular ideologies, whether intentionally or not. This is made clear from discussions in Science & Technology Studies, which look both at how technologies may be appropriated in ways that lie far beyond the intentions of designers [11][13] and how technology may be scripted [1] or users configured [16] to reflect, and often inadvertently to enforce, particular ideas about use. Here, ideological analysis is essential as an element of participatory, valuecentered, and critical design, which raise questions about the politics and values embodied in technology and suggest they should be brought to the fore, critically examined, and altered as appropriate in design.

The ideology of modernism

Over the course of my research career, I have become increasingly convinced that a key to understanding how HCI research approaches the problem of IT design and evaluation is by looking at technical research as an embodiment of an ideology of modernism. By "modernism" I am referring to a broad cultural movement which rose to prominence in the 20th century, which avows that people can and should change the world for the better through analyzing present conditions and improving them with the help of

scientific, technical, and practical knowledge. Broadly speaking, modernism rejects the idea that tradition should be the guide for present-day action, and seeks instead to fundamentally rethink and optimize the conditions of our lifestyle through rational planning. It is tied to a central valorization of the notion of "progress", and embraces technologies and scientific perspectives as the grounds for new definitions of what is good, true, and beautiful.

Modernism in this sense has been embodied since the late 19th century in a variety of cultural and intellectual movements, such as scientific cooking (the development of standardized recipes and techniques that will ensure better nutrition than ethnic cooking), scientific management (systematic analysis of how to optimize work processes for productivity), state socialism (centralized planning systems intended to improve societal quality of life), and modern architecture (rational schemes for optimizing the design of buildings and thereby the design of everyday human life). Three themes are key to the way I am framing modernism here: (1) faith in technoscientific reasoning and expert knowledge as a way to organize our lives; (2) orientation around means-end thinking, maximizing efficiency and exerting **control** as fundamental ground principles to optimize everyday processes; and (3) closed-world thinking [7], i.e. faith that formal, rational methods can capture (essentially) everything that matters about a given situation

It is common in these postmodern times to see modernism as passé, and certainly a naïve faith that science and rational systems can solve all of our human problems has received a substantial beating throughout the course of the 20th century and well into the 21st [14]. I agree with Latour's contention that "We have never been modern" [12], that is, modernism only ever represented an ideal which did not correspond to lived existence. Yet, I would argue, the *ideology* of modernism – the hopes and dreams that it represents, that we will, through rational reflection and expert knowledge, be able to systematically control our lives and solve human problems – continues to inform and influence not only technological development but the everyday life-worlds and experiences of many Westerners.

So, for example, many aspects of HCI research practice can be traced to an ideology of modernism. Faith in technoscientific reasoning and expert knowledge are reflected in the common understanding of HCI as a scientific discipline generating progress in technological matters, with experts who can inform practitioners on the ground of the best possible methods. Means-end thinking, maximizing efficiency, and exerting control are reflected in evaluation procedures which measure technologies according to how they optimize pre-given, rationally deduced metrics. Closed-world thinking is reflected in the common practice of seeing computational representations as one-to-one, faithful representations of entities and relationships in the human world [3].

It is important to note that by defining an "ideology of modernism" and arguing that it is deeply implicated in HCI as a discipline, this is not to claim (a la classical Marxism) that modernism is an illusion that must be destroyed in order to "fix" HCI practice. Indeed, much is laudable about the ideology of modernism, for example that it tends to drive people to seek novel

solutions for ongoing social problems rather than accept them in a fatalistic manner because things have always been that way. The goal, then, of ideological analysis is not to debunk the ideology of modernism but to raise awareness of it as a lens (rather than a transparent truth) and allow for analysis of its advantages as well as anticipation and handling of its typical modes of breakdown (e.g., through the limits of formalization). The eventual goal, then, of this work on modernism is to understand, through comparison with historical examples, what limitations the ideology of modernism places on us as a field, and to find and weigh the value of alternative methodologies based on nonmodern points of view.

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