# **Human-Computer Insurrection**

Notes on an Anarchist HCI

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# **ABSTRACT**

The HCI community has worked to expand and improve our consideration of the societal implications of our work and our corresponding responsibilities. Despite this increased engagement, HCI continues to lack an explicitly articulated politic, which we argue re-inscribes and amplifies systemic oppression. In this paper, we set out an explicit political vision of an HCI grounded in emancipatory autonomy—an anarchist HCI, aimed at dismantling all oppressive systems by mandating suspicion of and a reckoning with imbalanced distributions of power. We outline some of the principles and accountability mechanisms that constitute an anarchist HCI. We offer a potential framework for radically reorienting the field towards creating prefigurative counterpower—system and spaces that exemplify the world we wish to see, as we go about building the revolution in increment.

#### **CCS CONCEPTS**

Human-centered computing → HCI design and evaluation methods; HCI theory, concepts and models;
 Social and professional topics → Political speech; Cultural characteristics; Race and ethnicity; Gender;

#### **KEYWORDS**

anarchism; anti-capitalism; autonomy; power; intersectionality; oppression; social change; prefigurative politics; design; theory

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#### 1 INTRODUCTION

"You are ultimately—consciously or unconsciously—salesmen for a delusive ballet in the ideas of democracy, equal opportunity and free enterprise among people who haven't the possibility of profiting from these." [74]

The last few decades have seen HCI take a turn to examine the societal implications of our work: who is included [10, 68, 71, 79], what values it promotes or embodies [56, 57, 129], and how we respond (or do not) to social shifts [93]. While this is politically-motivated work, HCI has tended to avoid making our politics *explicit* [15, 89]. The result has not been the absence of a politic, but an "implicit neoliberalism" [41, 47].

In this paper, we offer an *explicitly* political HCI—an *anarchist HCI*—that reorients the field around the central principles of autonomy and the justification or elimination of power, with the aim of eliminating oppression. We explore the consequences that such a reorientation would have for our field's norms in relation to the wider systems of the world and the communities in which we engage. Finally, we present some mechanisms to move the field forward and hold ourselves and each other accountable for the impacts of our work.

# 2 CRITICAL WORK IN HCI

"A critical technical practice will, at least for the foreseeable future, require a split identity — one foot planted in the craft work of design and the other foot planted in the reflexive work of critique. Successfully spanning these borderlands...will require [work to] support the exploration of alternative work practices that will inevitably seem strange to insiders and outsiders alike. This strangeness will not always be comfortable, but it will be productive nonetheless, both in the esoteric terms of the technical field itself and in the esoteric terms by which we ultimately

<sup>\*</sup>All authors contributed equally to this work and consider it a collective creation. Intellectual property is theft.

evaluate a technical field's contribution to society." [2]

As part of the "third wave" of HCI, our field is engaged in an ongoing "turn to the social", described by Rogers as an increasing consideration of the social implications of our work [118]. The depth of our engagement with this has been limited by our position: HCI straddles both the academy (which frequently shies away from explicitly political positions [23]) and industry (often driven by principles and practices that contraindicate positive social change [135]).

One potential path through these problems is a critical approach to HCI: using theories that feature social, ethical and cultural considerations, along with mechanisms to critique interaction designs and expose their consequences [118]. Bardzell and Bardzell present such an approach in an overview of humanistic HCI, which they define as "any HCI research or practice that deploys humanistic epistemologies...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" [16]. Referencing Marxist, feminist, postcolonial and psychoanalytic methods of analysis, the Bardzells include within humanistic HCI an "emancipatory HCI", one which is "oriented toward exposing and eradicating one or more forms of bondage and oppression, including structural racism, poverty, sexual repression, colonialism, and other forces/effects of the hegemonic status quo" [15]. This work draws from components of Shaowen Bardzell's earlier work on feminist HCI, in particular her original conceptualisations of "pluralism, participation, advocacy, ecology, embodiment, and self-disclosure" [17].

Another approach, postcolonial HCI, is exemplified by the works of Lilly Irani [78]. Postcolonial HCI considers and deconstructs how colonialism's cultural legacy appears and persists in computing after the termination of colonialism's formal structures [111]. In contrast to HCI's traditional focus on "ubiquitous" methods, theories and technologies [7, 42], postcolonial HCI includes critiques of the way actions taken to help the "developing" world often follow the path of capital and private interests. Additionally, it explicitly and actively concerns itself with power relations [78]. In contrast to capitalism and ubiquity, postcolonial HCI researchers propose approaches based on social justice [139], the centring of indigenous knowledge and users [8], and the development of design paradigms explicitly made, rooted and deployed in local communities, contexts and knowledge [127, 150].

Along similar lines, Avle et al. push back strongly against the idea of "universal" or "rational" design methods, expressing particular concern for how these models may reinscribe colonial relationships [13]. Rosner considers how similar types

of design models (hackathons, IDEO, etc.) may limit consideration around design culture by enforcing the idea of the design process as the "producer of certain kinds of designers: creative, self-sufficient individuals" [120]. Not only do these conceptions of design challenge popular narratives of the types of artifacts design should produce; they also call into question the way the methods and pedagogy of design have been bounded. Irani's work on IDEO's "design thinking" model notes how it "articulates a racialized understanding of labor, judgment, and the subject and attempts to maintain whiteness at the apex of global hierarchies of labor" [77]. Luiza Prado de O. Martins presents a related critique, feminist speculative design, calling out the risk inherent in claiming an "apolitical" position, namely, contributing to the status quo of hierarchies and oppressions, and she cites the particular classism, elitism, and racism that have been propagated through speculative and critical design (SCD). As an alternative, Prado proposes approaching SCD from an intersectional feminist lens in order to explicitly critique and challenge oppressive power structures [100].

There are myriad other movements: queer HCI [92], post-capitalist HCI [47], and anti-oppressive design [136], each providing their own critiques of HCI's dominant "technochauvinism" [29] and neoliberal ideology. This critical scholarship has sometimes resulted in practical applications and tools, including Dimond's work on "Hollaback!" (and "feminist HCI for real") [39, 40], Alsheikh *et al.*'s exploration of postcolonial technology contexts [9], and Fox and Le Dantec's "Community Historians" project [51].

Along with many activists on the ground, these researchers and others have applied their respective critical lenses to nurture, support, and hold themselves accountable to the communities in which they live and work. Nevertheless, as with most HCI scholarship, the politics in almost all of these critical works are implicit rather than directly explicated.

Allowing our political stances to remain unspoken has constrained our ability to question and challenge the consequences of the work we put into the world. Further, this silence creates stumbling blocks for critique and accountability mechanisms. We argue it is imperative that members of the HCI community articulate the respective political foundations of their work, explicitly addressing (a) what state of the world is necessary for the work to realize its intended effect, and (b) what worlds are advanced by its execution. We believe such articulations would strengthen the foundation of these and other critical works, weaving them into a coherent and explicit politic of HCI. Building on Linehan & Kirman's "anarCHI" paper [95], along with Asad *et al.*'s "prefigurative design" [12], we outline our vision of one such explicit articulation: an *anarchist HCI*.

#### 3 WHAT IS ANARCHISM?

"Love labour, hate mastery, and avoid relationship with the government" [128]

A person confronted with the term "anarchist" may find themselves thinking of black-clad, bomb-throwing radicals seeking the destruction of society, an image stemming from the campaigns of "propaganda of the deed" in the 1880s [103]. But anarchism is far broader than that brief Eurocentric moment in time, constituting a diverse field (not school) of thought aiming to "root out and eradicate all coercive, hierarchical social relations, and dream up and establish consensual, egalitarian ones in every instance" [105]. Speaking generally, anarchism concerns itself with *power* and *autonomy*. Two core principles of anarchist thought are that autonomy can only be attained through ensuring a consensual basis for power relations, and that human dignity is fundamentally compromised in the absence of autonomy.

So what does this mean in practice? As with any political movement, the answer varies from person to person: anarchist thought covers a broad range of perspectives, philosophies and approaches to autonomy, an appropriate choice given the value *of* autonomy. In this paper we focus on social anarchism, also known as libertarian socialism, <sup>1</sup> both because of its long theoretical history and the way in which its central principles align with the power-critical and anticapitalist nature of the HCI works from which we draw. In contrast, *individualist* anarchism (which sees complete individualism without social responsibilities as the ultimate source of dignity) has often been critiqued specifically for failing to engage with power and the "free market", leading ultimately to the resumption of the status quo [24, 64, 107].

One of the major components of social anarchist thought relates to capitalism. As mentioned, anarchism is centred on autonomy and dignity—and is consequently concerned with the distribution of power. To social anarchists, capitalism's existence fundamentally undermines autonomy and human dignity by embodying unfair power relations [14]. Due to its dependence on the commodification, exchange and accrual of goods, capitalism guarantees both inequality between people and a lack of essential resources for some. This is not just an incidental or occasional side-effect of a capitalist system—it is both inevitable and *by design*, because one cannot have a purchaser without an unmet need, or accrual without disparity [59].

At first glance, then, social anarchism appears to simply be Marxism. And, indeed, social anarchism has a long history of drawing from Marxist thought (and vice versa) since the First International [124]. But there is a crucial difference: Marxism assumes the neutrality of the state, and that the oppression that stems from it is a consequence only of the social class that runs it. A "dictatorship of the proletariat", as opposed to one of the landowning classes, is all that is needed to turn it towards the good of humanity [105].

But anarchists, as discussed, require that every system of power—not just capital—justify the ways it compromises individual autonomy for collective autonomy. While some forms of social anarchism discuss shallow hierarchies as an example of such a justified compromise, social anarchists are unanimous in seeing the state as fundamentally dangerous. A state is inherently coercive and involuntary [151], necessarily (by creating a distinction between those vested with power and those giving power up) creates an underclass, and ultimately and inevitably shifts towards centring its own survival over that of any individual citizen under it [138]. Once again, this is not incidental; it is inherent [125]. This coercion and guarantee of oppression does not change if the state is organised with a purportedly communist economy interwoven, or premised on a different kind of dictatorship [66].

Instead social anarchists advocate, as Cindy Milstein puts it, "consensual, egalitarian [social relations] in every instance" [105], particularly in the form of communalism, self-governing voluntary associations [28], and autonomous zones [80]. The product of a person's work should be owned by themself [94]; the tools used to undertake this work should be shared by the community in which it takes place.

Forming these relations, and toppling unjust power structures, is the path towards autonomy and dignity. This work transcends the elimination of state and capital. Imperialism, racism, sexism, ableism, transphobia and other systems of oppression—systems which underlie and buttress more formal structures—do not just vanish when the more formalised structures that weaponise them do [53]. There is no dignity in a world that lacks capitalism but still features ubiquitous bigotry. For this reason, anarchism has a long historical integration with feminist thought [14, 58, 61], queer liberation [1, 85], anti-racist and anti-imperialist ideologies [87, 142] and the intersection thereof [43, 80, 119]. Despite its stereotype as a static form of European thought [99], anarchism has provided part of the theoretical basis for the work of Krishnavarma and Gandhi in India [48], the Zapatistas in Mexico [96], and the political philosophy underpinning the Democratic Federation of Northern Syria (commonly known as Rojava) [91]. In the current era of late-stage capitalism and globalisation, a resurgent anarchism (integrated with other locally-contingent political philosophies across

<sup>&</sup>lt;sup>1</sup>We would love to discuss other approaches to anarchism, but self-declared anarcho-capitalists "should be given no more consideration than [other] oxymorons such as a free slave or the living dead" [14], and the only anarcho-primitivist known to not consider literacy a cardinal sin has been in maximum-security prison since 1998 [81].

Africa [102], Asia [73], and the Americas [62, 96]) has acted to bring together those to whom existing mechanisms of social order have lost legitimacy [83], and encouraged the creation of small-scale collectives as well as large-scale political action [116]. As these examples demonstrate, anarchism is easily hybridised; with its focus on autonomy comes a focus on community-appropriate and community-determined approaches to change and governance. In many respects, anarchism is merely "the newest member of a global family that includes numerous historical and present day communal societies and struggles against authority" [145]: even Hobbes saw it as the natural state of human society [114].

To many, a world lacking states or capitalism sounds utopian anarchists trend towards the pragmatic and applied, away from deep theory. The focus on human dignity and autonomy means that the application of anarchist principles to the organisation of day-to-day life cannot wait for some far-off revolution: it must be enacted in the here and now, through prefigurative politics [75, 147]. The revolution comes not on a single day but through the creation of autonomous spaces and forms of organisation, wherever they can take root, both to provide what limited respite they can and because it is through creating these zones-through invalidating the claim that hierarchies of power are necessary, and through building the *counterpower* of institutions that offer alternatives to non-consensual power relations—that we go about "forming the structure of the new society within the shell of the old" [152].

# 4 TOWARD AN ANARCHIST HCI

"Any significant attempt to decentralize major political and technological institutions...could only happen by overcoming what would surely be powerful resistance to any such policy. It would require something of a revolution." [149]

In summary, then, a social anarchist view of the world is that:

- (1) Human dignity is greatest when human autonomy is greatest, and consequently when social relationships are entered into consensually;
- (2) Any relationship of power should be held in suspicion and continuously justified, and both a capitalist economic system and a state system of governance fail to justify their excesses;
- (3) The solution is the dissolution of both in favour of systems which maximise human autonomy, in a way that centrally recognises all forms of power, including the implicit systems of power such as race, gender, disability and class which underlie formal power structures, and seeks to eliminate them:

(4) This work must be done in a way responsive to local conditions, and in a fashion that is incremental, seeking to build the revolution by creating spaces in the here and now that embody those values.

So what would a field of HCI that is responsive to and built around these principles look like? Primarily, it would be dedicated to building *prefigurative counterpower*: creating constantly-justified spaces that embody autonomous, anti-oppressive values as a means to build the revolution in increment. This work requires that we, the HCI community, we-examine our core values and radically alter the ways we enact these values in our relationships with each other and the world. While we do not wish to prescribe a single path toward this revolution, we elaborate three interconnected threads where we see a need for these relations to be transformed.

The first and broadest area of scope is our relation with *the world*, defined as the ecological (in the traditional sense) and infrastructural aspects of human existence. Here we would be expected to centre concerns of sustainability, autonomy and control, particularly with regards to how we understand the full range of impacts of our work and the nature of the systems we support.

Secondly, we will need to reshape our *inter-community* relationships. Over the course of our work, HCI researchers engage with various individuals and communities—our "participants." An anarchist HCI would approach these sorts of interactions with the intent of allowing appropriate methods and tools to derive from a particular context [44]. We recognize that communities and environments are best understood from within, rather than through a technochauvinistic lens or "view from nowhere" [69]. We would rely on methods that are aware of how design and technology have been used to marginalise, and the oppressive nature of the systems we participate in—methods that actively work to unpick that use and participation [35, 136].

The last area, though first in terms of the work we have to do, is *intra-community* relations: how we as HCI researchers and practitioners relate to each other, and the structures we help develop and in which we participate. An anarchist HCI centres power and self-determination: correspondingly, it would necessitate a re-evaluation of inclusivity in our field and of the voices privileged in the processes of design and research. It would require that we demonstratively examine systems of oppression and work to undermine them, including those relating to gender [71], colonisation [79], racism [68], disability [130], and class. An anarchist HCI requires an intersectional lens to avoid flattening the experiences of marginalized peoples [37, 123]. It would also likely

produce new ways of organising, communicating and meeting that are governed by and accessible to the communities concerned.

An anarchist HCI is not merely a conceptual frame. Given its emphasis on prefigurative counterpower, it demands to be brought into being. It demands mechanisms for accountability and justification, adapted to our local context. It demands explicit demonstration that our work is conducted as accomplices rather than overseers and does not act to reinforce systems of power and oppression; and that we came "with empty hands and a desire to unbuild walls" [90].

#### Global relations

Given HCI's global reach, a political approach to our work must consider *the world*: the rest of the planet and the (often out of sight) communities and systems that comprise it. Specifically, we need to address how HCI's working practices often presume the universalism of our perspectives, and depend on structures that necessitate the exploitation of labour and resources.

An anarchist HCI is premised on autonomy, not only at the person-to-person level but also of different communities, cultures and contexts. A base requirement of this is an assumption of inherent legitimacy-that differing ways of being are valid ways of being. One cannot have both autonomy and the exclusive centring of one particular epistemic position. Yet dishearteningly, even within areas of HCI that feature liberatory rhetoric, we find a universalist stance. By this we mean that researchers assume their epistemic framings or their experiences within their communal and cultural contexts are "the" human experience. As an example we can take Gender HCI [19], a subfield concerned with the ways that gendered differences in socialisation make themselves known in technology being more- or less-accessible for differently gendered populations. In theory an anarchist approach to HCI would easily take root here; we care about power and oppression, and differences in technological access which replicate pre-existing inequalities are a quintessential example of that oppression.

But in practice, Gender HCI is constrained by a particularly narrow vision of gender, and one it treats as universal; with few exceptions [9, 27, 117, 144], gender is seen as an essentialist binary in which there are two categories, male and female, with corresponding social and anatomical categories, to which research on gendered differences performed in a Western, academic context is broadly applicable. This approach fundamentally ignores, amongst other things, non-Western models of gender [20, 21, 108], and the existence of transgender people [71, 82]. Gender HCI research is also frequently undertaken within corporate working environments that assume (or sometimes depend on) top-down

action and hierarchy [30, 31], then assumed to be generalisable to "software" or "gender". In both cases the result is the same—research premised on universalism that, as a consequence, implicitly delegitimises other ways of being.

An anarchist HCI must shrug off this implicit universalism, not just in relation to gender but in relation to any attribute of a context or individual, in favour of a pluralistic approach in which we interact with other communities on their terms, with an expectation that their members are those best-equipped to define and describe the difficulties being faced. In the case of gender, there are several examples of this approach being done—in particular Alsheikh *et al*'s work on intimacy in Arab contexts, and Alex Ahmed's work on trans-inclusive interaction design [4, 9]. Nonetheless, we have (as other papers note) much progress to make [84, 123].

HCI's dependence on exploitative global structures can be seen if we examine the predominant cultural conception and practices of making, which often feature an emancipatory rhetoric of enabling people to autonomously identify their needs and respond to them. Gone are (or will be) the days of mass-produced, industrialised consumer products and tools; instead, every home will feature a 3D printer that allows its inhabitants to construct items adapted to their specific use. In theory one might think an anarchist HCI would grab making with both hands as an example of emancipation; after all, don't we have self-determination? A reduction in the inequality of power relations? A reduction in the power of capitalism?

But the problem comes with making's relation to the rest of the world: one must ask how emancipatory a technology is, how much autonomy it induces when, for example, it overwhelmingly remains the preserve of those who are already most free. One must also take an ecological and anticolonial bent, as parts of both HCI and anarchism have already done [126, 134], and look at the work practices on which making is premised: if a 3D printer is in every house, a truly inhumane amount of copper must have been extracted. And "inhumane" and "extracted" are the right words, because mining is a literally exploitative activity and one that, under capitalism, promotes and perpetuates vast inequalities and injustices. In Chile, which produces a vast amount of the world's copper, the power structures that underpinned mining-some literally originating in colonial slave labour-were trivially adapted to solidify Pinochet's military dictatorship [54]. There is no separating out our advocacy and development of making from the costs that making entails-from the ways that, whatever the emancipatory rhetoric around it, it demands the legitimisation and use of exploitative systems that, beyond their already inhumane day-to-day cost, are so easily twisted into acts of genocide.

This is not specific to making—indeed, one could argue the *computer* in Human-Computer Interaction means that whatever improvements transpire in ecologically-friendly mining [60]. Nor is our concern solely about ecology: we are simply using copper mining as an example of the global infrastructures that our technology plugs (idiomatically and literally) into. Our point is that our field's existence fuels oppressive systems [86]. This is an inevitable outcome of infrastructures under capitalism, and even absent capitalism, infrastructure enacts control and hegemony [26, 109]; this is nowhere more apparent than in the infrastructures HCI researchers actively help build [98, 141]. Consequently from both an anti-oppressive and autonomous perspective, an anarchist HCI is at least highly suspicious of and at most actively opposed to centralised infrastructure. We should avoid making it; we should, wherever possible, avoid participating in it; we should, wherever necessary, actively seek to unmake it. Winner is right when he says that, absent centralisation, infrastructure and the lopsided benefits that come along with it will be harder to attain, or in some cases impossible [149].

# Inter-community relations

Despite the pessimistic note above, we do not mean to suggest that an anarchist HCI inherently opposes *all* infrastructures. Our goal is simply to avoid centralised infrastructure, and challenge systems that accrue power at the expense of human dignity. Given how infrastructures perpetuate their existences and amplify the values encoded within them [67]—and so are often weaponised for the purposes of hegemony and cultural imperialism [141]—an anarchist HCI requires the constant mapping and justification of infrastructures' power dynamics. Systems that cannot be justified should be supplanted.

In practice this may initially result in a reduction in infrastructure, with associated reductions in the easy transmission of information and goods, but that is largely because of how far (as Winner notes) the pendulum has swung in the direction of centralisation [149]. As a prominent example, Ashwin Mathew has tracked how the internet itself is not only centralised but *designed* to be centralised [101].

In the long term, there are other ways of running things. Our concern is not *organisation* but who gets to define the terms under which things are organised, and how consensual participation in and departure from systems is: with *autonomy* and *decentralisation*. Rather than an absence of technologies, we are talking about technologies built in a way that centres the communities using them and avoids reserving for some third party the powers to modify, adapt, and repair; about design processes in which the members of that community are treated not as participants but as *accomplices*. In infrastructural terms, that could (to continue the example of the internet) look like distributed replacements,

some amount of exploitation or practical scarcity is inevitable [36], which are already being prototyped [11, 106, 122]; more genwhatever improvements transpire in ecologically-friendly mining [60]. Nor is our concern solely about ecology: we are simply using copper mining as an example of the global infrastructures that our technology plugs (idiomatically and literally) into. Our point is that our field's existence fuels

But design processes in such an environment have to focus on the needs of the communities as defined by those communities: the world contains too many examples of what Meredith Broussard calls "technochauvinism" [29]-the deployment of technical solutions against the will or desire of the people subject to them-for us to be anything but cynical of a top-down approach, even absent an anarchist framework [29, 38]. Our relationship with local communities should be one in which we defer, recognising the centrality of local knowledge in developing local solutions. This consists not only of standalone approaches such as co-design[50], which has been used for large-scale community engagement [12, 51], but also the adoption of frameworks that recognise preexisting power relationships and oppression. An example of such a framework is Costanza-Chock's Design Justice (which, interestingly, draws on the example of Zapatismo, a politic that synthesises anarchist principles with indigenous philosophy [34]). Design Justice prioritises "projects that challenge the matrix of domination" [35], focusing on addressing oppression in an intersectional manner (as do many strains of anarchism [119]). Design Justice also aligns with social anarchist principles of autonomy and self-determination due to its focus on local and contextual solutions.

Whether rooted in design theory or anarchist theory, localism-based approaches to design and infrastructure pose their own challenges: aside from efficiencies of scale, issues such as privacy and harassment are potentially harder to handle in infrastructure without centralised oversight [65]. And there is always the question of who writes the standards that underpin this infrastructure; how easy it is to reconfigure nodes of, say, a distributed internet, to organise a new network based on new principles. While these (and myriad other) challenges should not be downplayed and must be confronted head-on, distributed and localised infrastructure presents an opportunity to build counterpower by creating autonomous spaces not subject to the centralised control that is inherent to much of modern computing [112].

# Intra-community relations

But building this counterpower requires us to engage in prefigurative work: to first organise our own community in alignment with the values of self-determination and consensual, self-organised relations and interactions. We must not only reckon with our contributions to power imbalances in the wider world, but also look unceasingly inward, interrogating how power manifests in our own relationships with each other. It is not possible for us to participate in the making of meaningfully different spaces if we are replicating the same dynamics that have brought us to this point.

We must recognise that our community does not begin any of this work from a "neutral" position (as if that were even possible). From a queer, feminist, anticolonial or critical race perspective, our field's norms and methods are inherently laced through with patriarchal, cisnormative, heteronormative beliefs that assume a white and western view of the world. Consider Ahmed et al.'s reflective piece on writing for an ACM magazine, in which the ACM, while accepting ad revenue from the U.S. National Security Agency, censored the phrase "sex worker" from an accepted piece about technologies for sex workers, with the argument that "ACM is not a political organization" [5]. Consider the demographics of sex work, and so who, precisely, experiences the most harm from the ACM's deliberate refusal to discuss the existence and rights of sex workers, and sex as a topic. Consider how decisions around language marginalise alreadyvulnerable people, and that our field already features critiques of its approach to such issues [22, 137].

More broadly, an examination of our community's priorities, as communicated by the SIGCHI strategic initiatives [133], raises some difficult questions. For example: if distributing our work beyond our community is a "core part" of our values, how do we reconcile that with the ACM charging \$1,700 to make a paper "Open Access"? With community standards under which making this paper available costs as much as one of the laptops on which it was written? If we care about "local and global HCI", what does it say that even CHI Indonesia publishes its schedule and proceedings in English [33]? What does it say that our annual plan dictates a minimum of 3 of the next 5 CHIs be held in Europe and North America [140]? How do we reconcile an initiative aimed at "supporting and promoting diversity in all its forms", with spending \$14,000 on inclusion events at our conferences in 2017 [131], and the same year, \$24,000 on a communications consultant for "messaging" [104]? A possible explanation for the gap between stated ideals and outcomes can be found in a survey of conference steering committee representatives, where respondents ranked inclusion programming as 5th of 8 possible priorities, estimating an investment of 12 volunteer hours to achieve the steering committees' expectations [132].

An anarchist HCI would demand a reconfiguration of these failed states, centring access and inclusion. This is not work that will be completed simply by declaring ourselves anarchists—see the (often justified) critiques of "manarchism" [25, 72]—but an anarchist perspective, with its focus on power and dignity as first-order principles of analysis, gives us a

stronger basis from which to build. This is not work that can justifiably be placed on the shoulders of those who need it. We cannot accept diversity initiatives that take the form, as they do in so much of the academy, of demanding marginalised scholars shoulder the burden of repairing the structural inequities that permeate our institutions [6], or tokenise us in surface-level diversity initiatives that primarily exist for the purpose of public relations [3].

This must be about more than just bodies: it is not diversity if we only accept marginalised people who are stripped of the epistemic models that underpin experiences of being Other, or have the work they draw from those models held to an unequal standard of legitimacy [55]. This must be about plural ways of contributing; plural ways of being present. We would explore different ways of structuring how we gather and conference—whether expensive and exclusive gatherings of researchers who (speaking practically) have either the employment benefits to attend, contributed a grantsupported paper, or both, act fundamentally as barriers to inclusion and as inducements to inequality. We might look at distributing conferences in their entirety, enabling participation from disparate locations and disparate contexts; we could reorient conferences from closed spaces to open ones, with scholars travelling to talk to the public about their work. We could create avenues for publishing that do not operate on the premise that only in English can legitimate science be performed. And if those outside are not interested in participating, when allowed to define the terms of that participation, HCI can hardly argue its work is emancipatory or empowering.

#### 5 ACCOUNTING FOR HCI

"We must recognize that ethics requires us to risk ourselves precisely at moments of unknowingness, when what forms us diverges from what lies before us, when our willingness to become undone in relation to others constitutes our chance of becoming human." [32]

If we want our work to challenge structures of oppression and support human dignity, we are obligated to continually interrogate ways in which our practices and outputs require, perpetuate, or amplify power inequalities. We must work to ensure our technologies actively contribute to (rather than detract from) human autonomy and dignity. Toward these ends, we propose some accountability processes for an anarchist HCI.

An anarchist HCI necessarily rejects the premise of a "neutral technology" [63]. Like many HCI and critical theorists [45, 46, 88, 143, 148], an anarchist HCI seeks to surface the implicit and explicit politics of HCI contributions. While we

often expect HCI work to include a researcher stance or reflexive statement in relation to the work, anarchist HCI demands a robust and critical accounting of how we and our work relate to any power structures that oppress people or deprive them of agency. This might manifest as comprehensive, publicly accessible documentation of requirements, intentions, and methods for novel designs—documentation that proactively demonstrates that the proposed interventions, at a *minimum*, do not reinforce oppressive power structures.

We propose that anarchist HCI should actively contribute to the building of counterpower. Rather than yielding "responsibility for enabling human flourishing [to] state and corporate actors" [93], we argue that it is necessary to actively build systems that undermine such actors, recognising the way that technology metastasises capitalism and the state's worst intentions and vice versa [49, 97, 98]. Some promising recent work toward these ends include Baumer & Silberman's proposal not to design [18], or Pierce's suggestion that we "undesign"—inhibit or foreclose—particular capabilities of technology [113].

Given the inevitability of exploitation under capitalism and the state, all work should affirmatively show that it prefigures autonomy and dignity. In other words, that the methods and outputs were driven by the interests and desires of the individuals and communities impacted by the work—not by funders' implicit or explicit expectations. We use "desires", with its implications of subjective, internally-known and validated truth, intentionally: work cannot be undertaken without the active consent and participation of these communities.

One way to incorporate this active consent and participation could be a "right of participant response" to research findings and design interventions. In other words, researchers have the ongoing responsibility to provide the research to participants in a comprehensible form. Participants' responses to the work will be considered inherently valid (i.e., they do not require the affirmation of academics), and these responses should be included in whatever form(s) and venue(s) the research is disseminated. Through such an accountability mechanism we might remake HCI to privilege impacted communities. This remaking would contribute to more equitable inter- and intra-community distribution of both participation and the benefits and burdens of design [35]. A related accountability practice could be to alter the peer review process to include community reviewers who can evaluate work intended for publication based on their experiences and comment on the appropriateness of the work's methods, outcomes and consequences. Equitable distribution of benefits and burdens would also necessitate that those community reviewers be compensated fairly for their labour.

These mechanisms would also necessitate that we produce and share knowledge in formats and settings that are appropriate for a given context. It would no longer be considered legitimate for knowledge to be cloistered in the academy, locked behind paywalls or gates, or for academic scholars to be perceived as the sole or primary sources of knowledge production and arbiters of human experience. Rather, in alignment with feminist epistemologies, anarchist HCI would consider knowledge to be situated in particular contexts [69, 70], and would require that the outputs of any knowledge-producing activities or HCI interventions be created in collaboration with and in forms accessible to the communities concerned. Fox and Rosner have put forward one of the forms that dissemination of research might take [52], but we would argue that when the community is truly the locus of power, the idea of "dissemination" of knowledge may no longer have coherence at all. Instead, communities would determine how to articulate the shared meanings produced during knowledge-making work.

We wish to reiterate that these accountability mechanisms are only part of the work: we have an obligation to institute them but also, as stated, to move beyond them, actively collaborating with communities to break existing systems of injustice and build the world we wish to see. These mechanisms are necessary because they are prefigurative; they are not, in and of themselves, sufficient.

#### 6 DISCUSSION

"We're setting out from a point of extreme isolation, of extreme weakness. An insurrectional process must be built from the ground up. Nothing appears less likely than an insurrection, but nothing is more necessary." [76]

A number of movements within HCI have been working toward situating communities as the locus of power and the arbiters of meaning and value in HCI. We argue that our failure to realize these ideals stems from an inability to reconcile our political rhetoric and critical lenses with the power structures under which we operate. The most promising solution to this dissonance is a rededication of our field towards building prefigurative counterpower.

The justifications, principles, and mechanisms of an anarchist HCI can be used to guide our work and determine whether we are, as a field or individuals, in concordance with our ideals. In outlining these tenets, we do not claim to have created this work out of whole cloth; as discussed, much of this work is *already being done*. What we offer is an articulation of where this work overlaps—what principles underlie much of it—and an articulation of processes towards accountability. Most importantly, we are drawing a line in the sand, and offering a vision of a present in which

nothing is treated as fixed, and by consequence, everything is treated as *possible*.

This is an anarchist vision, but it is not *the* anarchist vision, nor the only political vision HCI could take. In her comments on Linehan & Kirman's "anarCHI" alt.chi paper, Lilly Irani raised rhetorical questions which we would, slightly rephrased, replicate: what kind of research would you do if you were doing socialist CHI, or libertarian CHI [95]? What kinds of research or practice would feature in a *different* anarchist HCI?

While we have our own biases, believing in a particular political vision centred on autonomy and then mandating its adoption would be the height of hypocrisy. In our view, it would violate the anarchist principles we have outlined to dictate either specific implementations or specific practices toward enacting anarchist HCI. Rather, as we have articulated, we view communities as the rightful decision-makers and loci of power, as they are the entities that can assess their own needs and must live with the consequences of any interventions. Part of our aim in this work-and ideally an ongoing process in which the HCI community will engage—is a deliberate creation of space. We might envision a rupture in oppressive design paradigms that continually widens as individuals and collectives establish the aims, principles, and practices to architect the worlds they wish to see. It is worth considering that, despite our proposed reforms to how our community functions, we have no guarantee that it is salvageable: that it can feature equitable power relations while even vaguely resembling its current form. A HCI that centres anti-oppression work and rejects capital and the state will look very different from how it does now—and may simply not be possible.

But if research into ways of being and organising—and, for that matter, the ease of drawing on so much of HCI in forming an anarchist vision—shows us anything, it is that we already have the tools. What normative society often sees as "alternate" or "traditional" ways of configuring our communities and spaces are frequently anarchistic in nature [75, 102, 115, 146]; what we see as cutting-edge HCI frequently lends itself to, or in some cases (we would argue) necessitates, an anarchistic approach to structural change. We don't mean to undersell the difficulty or complexity of our task: we are proposing confrontation with vast systems of power. But it is clear at this point that these systems do not work for most of the world: that the only honest alternative to confronting them is acknowledging our field's claims about working for the good of humanity to be a lie.

# 7 CONCLUSION

"Remember this: We be many and they be few. They need us more than we need them.

Another world is not only possible, she is on her way. On a quiet day, I can hear her breathing." [121]

We have presented a vision for a remaking of HCI, one that synthesises theories, methods and fields of study that focus on the dignity, not efficiency, of humanity. With this remaking, designers and technologists are no longer gate-keepers of knowledge or production; we are potential (rather than necessary) collaborators. Our focus is on those marginalised by the way things are, and how we can participate as willing accomplices in the destruction of the perverse machinery that perpetuates this state of affairs. In serving as accomplices, we may find our vocational knowledge and output is valued as secondary to the contributions and perspectives we can offer as individuals, or as members of *our* communities.

We have no certainty as to what happens upon the adoption of an anarchist HCI: what the knock-on effects are of radically remaking our field to prioritise autonomy, self-determination and the justification or reconfiguration of power. But we can only find out by drawing this line in the sand: by asking members of our field to either justify the way things are or join us in changing them. We cannot force you to participate, nor would we want to. All we can do is ask you to decide.

Which future do you want to help build?

#### **8 ACKNOWLEDGEMENTS**

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