

Share Your Values! Community-Driven Embedding of Ethics in Research

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Ethically-defensible research requires wide-ranging, holistic, and deep consideration. It is often overseen by Research Ethics Committees, Institutional Research Boards or equivalents but not all organisations have these and where they do, their degree of independence from organisational priorities varies (perhaps leading to research that would create reputational or other difficulties for organisations being left unpublished or unacknowledged). Conflicts of interest can therefore be left unmanaged, participants may be exploited, and society may not benefit. In this paper, we claim that publishing communities (e.g. scholarly conferences) can play a larger role in supporting improved ethical practice by defining and communicating the ethical values of their community's collective identity and aspirations. This approach is not prescriptive like procedural ethics nor as broad as general research ethics codes (both are important) but offers a tangible way to unify ethics concerns across research contexts.

CCS Concepts: • **Social and professional topics** → **Codes of ethics; User characteristics**; • **General and reference** → **General conference proceedings; Cross-computing tools and techniques**; • **Human-centered computing** → **HCI theory, concepts and models**; *HCI theory, concepts and models*; Accessibility theory, concepts and paradigms.

Additional Key Words and Phrases: Ethics, Values, Research

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1 INTRODUCTION

The contemporary research landscape involves researchers from many contexts: academic, governmental, and commercial. Some areas of research have become ostensibly easier to undertake with the prevalence of data and ways to reach potential participants, and it can be easy to miss or ignore power imbalances and other ethical factors in favour of a (justifiable) desire to research at speed and scale for maximum impact and research quality. These power imbalances can exist in traditional situations between researcher and researched, but also between the researcher and the environment in which they wish to, or need to, undertake their research [26] with the power balance being sometimes in favour of, and sometimes against, the researcher. For instance, Franzke et al. [26] identify the fact that platform design can constrain researchers. Locatelli [33] points out the limits to data use imposed on researchers through API terms, citing discussion of partnership-working as a potential solution, but also identifying the ethical problems of research independence that can arise in these situations.

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While ethics procedures in oversight bodies can help to counter such issues, not all researchers are governed by, or have access to, such bodies. In addition, the ethical values such bodies adopt themselves exist in the context of an organisation's wider goals, ethos, and values. Thus, an organisation whose goal is primarily commercial success may adopt different ethical values to an academic institution whose goal is to produce research output for society. Involving others in pre-research review helps to manage the inherent conflicts of interest between beneficiaries (e.g. research sponsors and researchers themselves, or participants who may benefit through incentives) and those being researched (the participants or their data), and can help to ensure that the outcomes of research (whether successful or otherwise) are appropriately disseminated so that society may benefit. In both commercial and academic cases, what is sought is ethical defence of the work to be undertaken and this itself sits within societal and community norms, expectations, and acceptance. Recent debates about the role of social media in daily discourse provide a good example of the way in which societies are challenged by and respond to emerging ethical issues ¹.

To address this problem of a somewhat fragmented research ethics landscape, in this paper we put forward the position that 'publishing communities' (conferences, journals) have a significant role to play. In particular, we scrutinise the Human-Computer Interaction (HCI) debate, aiming at suggesting actions for the venues in this area. Ethics discourse is increasing in conferences and journals but tends to be limited to whether or not a procedural ethics approval has been obtained, and whether the authors have any conflict of interest with those involved in the research, or in financial terms.

Drawing on our experience of developing an ethics code for a multi and inter disciplinary conference, we explore a range of issues that can arise when trying to address these problems, and make recommendations for conferences in HCI that may help in setting out value-based ethics statements and codes. Our hope is that strengthening the ethical positions and values of publication venues will encourage researchers and research sponsors within and outside academia to increase the level and content of independent ethical scrutiny of their work and thus benefit society on a broader scale.

We argue that since a publishing community such as a conference brings together those who work in a similar area from all their varied contexts, it has the ability to influence the ethical values considered in those contexts and by those researchers. It is our position that such venues should discuss, define, and articulate the ethical values that they expect to see respected, discussed, and embedded in the research that they publish (and where those values should be evident and evidenced in the research lifecycle). This would perhaps have the effect of ensuring researchers respect a set of extra-contextual values in their work, allowing them to more effectively manage conflicts of interest created by the context in which they undertake it. Declarative value-based approaches sit between the broader frameworks of domain-specific ethics guidance (where potentially relevant issues to particular areas of study are typically identified) and procedural ethics (where specific concerns of an organisational context are articulated and elicited for approval). They express things that a community believes are important to ethical research conduct in the area of enquiry it serves.

2 CONTEMPORARY CONTEXT AND ISSUES

Ethics across science, technology, and the arts are recognising new levels of complexity as governances for equality (e.g. economic, gender, race, sexuality) and environmental protection are becoming part of public infrastructures, capitalist designs and public desires; as datafication of the human (e.g identification, documents, medical records, big data) speeds

¹A notable recent example can be identified with the so-called Facebook Files report see, for instance <https://www.theguardian.com/technology/2021/oct/05/facebook-frances-haugen-whistleblower-regulation>

and scale up to new global states and status (e.g. social, personal, health), there is an urgent need to rethink ethics within our interdisciplinary practice.

Drawing from Bourdieu 'cultural capital' (1985) [14], and more recent theorisation of digital capital [28], data capital [44], datafiction [23] and platform capitalism [42, 46], we frame, data capital has human's public and private actions, consumptions, productions, creations into capitalist values, that in their homogenisation forms dominant narratives/outputs, that reflect social oppression of marginalised identities, whilst restricting cultural imaginaries, ultimately highlighting the complexity between technology, speed, and ethics.

The Menlo Report [21] identifies a range of factors that contribute to this challenge including the speed and scale of Information and Communication Technology (ICT), and its decentralised and distributed nature. It claims that this results in distance between researchers and their research subjects and the increased speed of potential harm arising from the ease with which people and their data can be engaged in research (see also Fiesler and Proferes' discussion of participant perceptions in social media research [25]). The Association of Internet Researchers' ethics framework [26] articulates some of the problems of ethical management that arise in this context, in particular consent, risks to researchers, and of particular relevance to our argument here, power imbalances, particularly where corporate platforms are inherent in the undertaking of research. Locatelli's companion essay [33] details further the complex ethical issues involved where academic/industry partnerships exist.

While the above examples relate to online research, ethical difficulties exist in most, if not all, research contexts. Conflict-of-interest issues are perhaps more easily observed in commercial settings where there is a clear organisational goal towards monetisation that may affect whether or not research is published (e.g. to protect reputation), how it is undertaken, or the direction of investigation (e.g. see Gebru's discussion of agenda-setting by big tech and government funders²) but they exist in academic situations too (e.g. see Chua's acknowledgement of the academic benefit to the researcher of publishing on the basis of user data [18]). Further complexities of working with, within, and in partnership with corporations and corporate data are discussed by, e.g. Locatelli [33] and Bruns [15] in more depth.

3 ADDRESSING THE ISSUES

The question is what, if anything, can be done to help make conflicting interests in research clearer? Often the solution is left to the virtue and academic integrity of the researcher (or some notion of inherent virtuosity in research itself irrespective of originating context), rather than being captured in the strength of a disinterested surrounding framework for ethical management e.g. through an ethics committee that itself needs to be independent (recent guidance on the remit of research ethics committees includes a criterion stating that corporate image and related matters must be separated from the work of such bodies [17]). A virtuous approach is certainly helpful, but places a heavy unsupported burden on the researcher to maintain their stance in the presence of competing pressures. Moving decision-making into procedures may help but overly procedural ethical management can itself be problematic. For instance, Markham indicates that standardised procedures instituted by Institutional Research Boards (IRBs) can end up dictating what is ethical [35].

The solution, in our view, needs to involve 'structural' aspects, and values. It is neither reasonable nor possible to impose specific ethical procedures on organisations and institutions in general: the transnational context of research makes this unachievable, organisations would (quite reasonably) not feel bound to accept the outcomes of such procedures, and the management of confidential information about research would be challenging. However, there is

²Timnit Gebru, "For truly ethical AI, its research must be independent from big tech", published on Monday 6 December 2021, the Guardian: https://www.theguardian.com/commentisfree/2021/dec/06/google-silicon-valley-ai-timnit-gebru?mc_cid=051d11dfb0&mc_eid=5fc043c489

one structural stage of the research process where researchers from all kinds of organisations come together under a common ‘banner’ and that is in a publication venue such as a conference or journal. The ostensible purpose of scholarly conferences (as opposed to industry-oriented events) is to share knowledge for the benefit of society. As such, all work being presented there should be brought forward with the purpose of societal benefit, whether ‘positive’ or ‘negative’ in terms of the results being presented, and irrespective of the impact on the institutions of those presenting it.

If the publishing community is the place where researchers unite in pursuit of the common good, that community and/or venue has the opportunity to influence the ethical consideration given to the research it publishes, and by doing so, can help to disentangle the conflicts of interest that arise further back in the process and within the individual contexts of the organisations concerned. What is required is a (likely non-procedural) approach to communicating the values of that community and its expectations in relation to ethical consideration and discussion in the work being published.

An additional benefit of values-based reflective approaches is that they reduce the risk of ethics considerations themselves becoming commoditised. Ethics approval risks becoming an economic good; a ‘tick-mark’ to be attached to a result to increase its marketability, or even becoming a marketable good in and of itself. There is therefore a question of how ethics processes can be protected themselves from exploitation (so-called “ethics washing”) and one way to help is perhaps to ensure that the individual relationship between the community’s values and a particular piece of work is discussed in that work. As a consequence, each ethical discussion is unique and specific to the work in question and thus not easily packaged as a commodity.

4 ROLE OF THE INTERNATIONAL RESEARCH COMMUNITY IN SETTING OUT VALUES

The research community’s conferences and journals can play a major role here in promoting and defending the values of the community they represent. This raises a question of which ethical values should be addressed. This is in one sense a matter for an individual community, however, we suggest that ethics must go beyond protection and move towards aspiration. Research communities can do more than just protect their researchers and participants from risk of harm arising from research (although this is of course very important) but are free to consider and promote aspects that may advance and enhance the broader human and natural environments in which research takes place. Research ethics in this context can thus engage with issues such as equality, diversity, pollution, and sustainability. It is similarly important that publishing communities look inward to consider how they should embed the aspirational values in their research in their own structures (for example, are environmental or equality, diversity, and inclusion (EDI) concerns fully embedded in all aspects of the conference committee structure, as well as perhaps having their own separate committees of focus?).

We argue that conferences should work toward the development of ethics codes to lead and control the ethics discourse within the academic debate. Making this debate regularly explicit and in relation to various types of published research helps early-career researchers to quickly become familiar with the concerns, approaches, and values of their field (e.g. see Gold and Krinke [27] for a discussion of this in the context of software repository mining). It also more easily permits international debate about research practice which can help Research Ethics Committees (RECs)/IRBs and those who interact with them. Given the centrality of the CHI conference in the HCI discourse, we suggest that this venue should be leading the process and initiate the development of such a document. In the rest of this paper, we suggest some literature that could act as a grounding foundation for such a text and draw some insights from our experience in the development of a similar document for the New Interfaces for Musical Expression (NIME) conference.

5 WHERE TO LOOK FOR A START? ETHICAL AND VALUE-ORIENTED DISCOURSE IN HCI

Over the past few decades, the HCI literature have directly or indirectly tackled several ethical aspects of the HCI practice and debate. We believe that this literature can be used as a starting point to lead the creation of codes of practices for conferences and venues.

An early account can be encountered in the proposal of a human-centred approach to computing in HCI, and in particular in Bannon's proposal to overcome the world user, toward the adoption of the idea of "human actors"[1]. In this proposal, the author claimed that "People are more than a sum of parts, [...] they have a set of values, goals and beliefs about life and work". In such a perspective, the values and the personal belief of the people we are designing for should be included in the design process, and in the academic reflections in general.

By further developing the importance of positioning the human beings at the centre of the HCI debate, Bardzell and Bardzell have proposed the idea of a humanistic HCI [4]. According to the authors, humanistic HCI encompasses all those research that deploys humanistic epistemologies or methodologies toward the development of studies, design processes, theories, agendas or any research or practical aim. By reflecting on the role that humanities have and can play toward the formation of knowledge, the authors have underlined the social purposes of such a perspective. In particular, the authors refer to the role that humanities have played since the 18th century to "educate and cultivate the free citizens of Western democracies" [4]. The authors further developed their reflection arguing that emancipation can be central in the social action that a humanistic approach can enact in HCI. "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." [4].

5.1 Social emancipation and empowerment

Social emancipation and empowerment have been central in the Participatory Design (PD) approach for decades, in which a design process is thought of as a shared experience that empowers all the persons involved. However, as it has been pointed out the term PD has been progressively depoliticised and washed out to become almost a mere synonym of user-centered design [2]. Recently, it has been discussed that digital commons can nurture Participatory Design practices and research to "critically protect and support sustainable futures" [13]. Digital commons are digital tools that can facilitate commoning practices, that is a shared organization of the management of resources. Bettega and colleagues [9] have recently proposed that digital commons can be commons in design when the digital tool is commonly realised (e.g. Free Software, see, for instance, [8]) or be commons through design when the digital tools support a shared management of a resource (such as locally produced electricity, e.g. [16]). Digital commons have been successfully used in process to support specific communities such as political and cultural activists [48], low-income populations [49].

Digital commons also offer the possibility to reflect on the political economy implication of technology adoption which has been an underscrutinised topic to the point that Ekbja and Nardi spoke about it as the "elephant in the room" in the HCI debate. In their paper, the authors point out that several economic-related ethical issues related to technology, including labour employment "from the taxing and repetitive microtasks of Mechanical Turk, to user training and behavior regulation", to the increasement of social inequality as the economic value generated is not equitably distributed. It often favors a select group of actors, often at the expense of others [24].

A reflection on social power distribution can also be found in Keyes and colleagues' proposal of an Anarchist HCI. The authors proposed an "explicit political vision of an HCI grounded in emancipatory autonomy [...] aimed at dismantling

all oppressive systems by mandating suspicion of and a reckoning with imbalanced distributions of power” [31]. In their proposal, the author rejects the idea of a “neutral technology”, while on the contrary they argue for the need to scrutinize explicit and implicit values and implications of any technological artifact. In particular, the authors stated that “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”.

An ever-increasing corpus of literature in HCI is also proposing that researchers have a responsibility to examine the social and political implications of their work as well as exposing the cultural and ethical consequences of interaction design [4, 31, 39, 47]. Morreale and Eriksson called for HCI researchers to ‘critically interrogate the ideologies and norms that are embedded in the software’ [39]. This call resonates with Wakkary’s recent depiction of artifacts design as an ethico-political practice [50].

5.2 Sustainability

Sustainable HCI [34, 45] also sheds light on another important value: environmental sustainability. Blevins has discussed ten actions, the range from greatest to least negative environmental impact that ranges from disposal to actively repair. Based on these, the author suggested some principles to promote a sustainable HCI practice [11]. Di Salvo and colleagues have proposed a taxonomy of the various approaches taken in the area of sustainable HCI, while discussing his finding, the authors identify the need to foster a common debate on the topic [20]. Recently, Knowles and colleagues have also underlined the importance to foster a values-based debate; in this paper, the authors reconnects sustainable HCI to other topics such as confronting the economy and advocating social justice [32]. Similarly, Dourish also connected sustainability to political issues [22].

5.3 Feminism

Another area that has been explored in the HCI discourse is related to gender issues, and particularly relevant is the proposal of a Feminist HCI [5, 6, 43]. In 2010, after providing an overview of the feminist movements, Bardzell points out some opportunities to HCI to reduce biases in HCI research and knowledge in favour of pluralism and participation [5]. In a following paper [6], Bardzell and Bardzell have pointed out that a feminist approach to HCI should account for both scientific and moral objectivities. Additionally, the authors pointed out the importance of reflectivity “about whether the research is delivering on its ambitions to be feminist, improve human quality of life, and undermine rather than reinforce oppressive social structures” [6]. A recent notable example of such a perspective is Atari Woman³, a project that aims at narrating the hidden histories of women and gender minorities that made possible the development of computing technologies (see [10]).

Other recent feminist approaches and thinking to digital technologies, such as D’Ignazio and Klein’s Data Feminism [19] and Full Stack Feminism⁴ and in Race After Technology [7], can be found in other neighboring academic discourses such as STS and Cultural Studies.

5.4 What’s next?

We have seen a number of works presented at CHI or in related venues that explicitly address issues related to ethical values that are related to the need to bring out the human/humanity as the heart and ultimate beneficiary of all research. This overview does not aim at providing a comprehensive review of how ethics and values have been discussed in HCI,

³<http://www.atariwomen.org/>

⁴<http://ifte.network/full-stack-feminism/>

it simply aims at pointing out some elements. As all these perspectives exist and have been discussed in the academic debate, we argue that this can constitute a good starting point toward the building of a shared code that can be used to guide HCI researchers. However, the existence of this literature with an implicit or explicit ethic perspective and a set of underlying values is not sufficient per se. We argue that conferences and editorial boards should incorporate a reflection on these topics in the guidelines for publishing. In our view, the two following questions could be used toward this aim: Are the values underlying these approaches shared among the community? Can these values be incorporated into a code?

6 DRAWING FROM OUR EXPERIENCE/POSITION WITH THE NIME CODE

The four proponents of this alt.chi paper have recently developed a living document entitled “NIME Principles & Code of Practice on Ethical Research”⁵ that contains and describes the standards for the NIME community and presents ideas on how these values can be addressed. In this section, after providing an overview of NIME research practice, we wish to provide some brief insights about the process and outline some relevant parts of that document.

The International Conference on New Interfaces for Musical Expression (NIME) is an annual event that “gathers researchers and musicians from all over the world to share their knowledge and late-breaking work on new musical interface design.”⁶ The NIME conference initiated as a workshop held at the Conference on Human Factors in Computing Systems (CHI) in 2001. Since this initial workshop the conference has been yearly organised around the world, hosted by research groups dedicated to human-computer interaction, computer music, and interface design. The NIME community has been characterized by a distinctive attitude toward a self-reflective research. For instance, in 2017 a compound book that comprises the most impacting and relevant papers presented at the conference has been edited [29]. Researchers have developed researches that analyses trends within the community, for instance in the development of interfaces [30], their longevity [40], the relation between technology and the music performed [41], or with musical scores [37], the value of community in interactive music research [36].

Among the various self reflective research developed within the NIME discourse, Barbosa et al. [3] classified the different evaluation strategies used in the NIME research, identifying performers as the main target of this evaluations. However, a musical interface or an instrument, might not have a “right use” or a specific target or objective, being more important creative forms of appropriations. This point represents a difference with the traditional HCI approach, but shares many commonalities that have been present in the third wave HCI [12], and in the Humanistic approaches to HCI [4]. Therefore, despite not being exactly the same conditions, some reflections developed in the relation to evaluations in NIME can be transferred to HCI research.

NIME researchers have also started to look at trends related to ethics issues, such as gender balance [51], and environmental sustainability [38]. On an organisational level, the NIME community has recently appointed a number of people as officers for diversity, environmental issues, and ethics. These groups’ primary role was to develop strategies in the form of codes and documents for each of the topics respectively⁷. Therefore, in the development of the documents about ethics, it has been relatively easy to incorporate also the perspective of the diversity and the environmental reflection. Additionally, the document, which in the final form has been authored by the same authors of this alt.chi, emerged from an initial broader process with a larger part of the community via chat application and shared documents.

⁵<https://www.nime.org/ethics/>

⁶From NIME website: <https://www.nime.org/>

⁷A diversity code (<https://www.nime.org/diversity/>) and an environmental code (<https://www.nime.org/environment/>) have been developed. Additionally, some other actions have been taken, such as the development of a wiki for a sustainable NIME practice (<https://eco.nime.org/>), and specific programs and workshops to facilitate inclusivity (see: <https://diversity.nime.org/>)

This has allowed us to incorporate in the document a multitude of perspectives. Finally, the code is intended to be a living document describing values not a static set of policies (we sought community feedback on the code through a survey and a workshop we ran during the NIME conference).

This last point connects to one of the core aspects and to a certain extent a novelty introduced by the NIME ethical principles: it describes values and not specific strategies to, for instance, protect participants. Indeed, the objective and scope of an ethical document that belongs to a conference overlaps only partially with the primary aims of ethical committees which need to be very specific and informed about the local realities mainly, and tightly (and rightly) focusing on the protection of participants. The ethical principles described in a document such as the NIME code “still include research participant protection, but also encourage authors to orient their work towards fairness, inclusivity, accessibility, and sustainability so that the work presented at NIME is reflective of the community’s values.”

For instance, the code asks the authors to promote diversity, inclusivity, and environmental values and acknowledge the difficulties met. Further, the code aims at promoting research that “seek to look at the full spectrum of needs, backgrounds, inclusiveness, and access to their creations” or to “seek to adopt FLOSS/FLOSH (Free/Libre & Open Source Software/Hardware) to support a democratic and inclusive approach to tool/instrument making”. Another relevant point of the document is that data about individuals should be considered as the expression of that individual “thus deserves the same level of ethical protection as an individual themselves”.

Starting from the 2022 edition of the conference each submission is required to include a paragraph in which the ethical concerns and underlying values related to the presented work are discussed. These paragraphs are subject to revision process and will be included in the proceedings of the conference. With this action we hope that ethics increasingly become an active part of the discourse. It is important to note that the ethics officers do not have the power to make decisions about paper acceptance or rejection, but have a broader role in supporting the conference and the reviewers in these aspects.

Despite a detailed overview of the entire process of the creation of the NIME code and a full analysis of its content and of the strategies related to its enactment being beyond the scope of this paper, we hope that the few elements hinted here can support the creation of such a document also for other SIGCHI events.

7 CONCLUSION

In this paper, we provided an overview of some of the current needs of discussing ethical issues in academic research. We advocate that conferences could play a central role in leading this debate and shaping future ethics practice. To this end, we suggest that CHI would benefit from developing a code of values of this type. We want to stress that this type of text should not be prescriptive or procedural, rather offer an aspirational ethics guide to be implemented and applied in the actual research.

Drawing from the NIME Conference Principles & Code of Practice (live document) on Ethical Research, we can suggest the following topics as starting points for conversations:

- Accessibility
- Environmental matters
- Inclusion
- Socio-economic fairness
- Data and privacy

Please consider that these issues arise from ongoing discussions and the positions that result cannot be considered as definitive or necessarily complete, but need to be constantly updated based on developments in society and in the research community.

We want to conclude by proposing a number of provocations in form of questions that we hope can be of use toward the development of a text describing CHI Values:

- What does the CHI community consider to be important in research processes, outcomes, methods, materials?
- How are these embedded into the CHI conference or the TOCHI journal operations?
- How are authors' contexts brought forward and conflicts of interests (both contextual and investigatory) identified? Should this apply to invited speakers?
- How can values be expressed inclusively?
- Does CHI deal with multiple conflicting disciplinary value sets (e.g. practice or research, arts or science)? If so, how can these values be respected and promoted in its operations?
- How can the CHI conference engage the HCI community in developing and collectively owning these values?
- How do ethics values expressed by the community interact with local ethics processes and bodies, and with situations where such bodies are not available?

In conclusion, we have advocated that conferences in general (and CHI in particular) would benefit from articulating a set of ethical values with which authors should engage when intending to publish their work at the conference. This would address some of the difficulties involved in managing conflicted interests arising from research contexts and methods, and perhaps more importantly, would demonstrate an aspirational and visionary path to improved research practice in the future.

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