
Co-nerds or Co-workers?: Intersecting cultures of maker communities

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Abstract

In this position paper, I discuss how the tensions of intersecting fabrication cultures and maker identities have affected the management and maintenance of hackerspace and makerspace communities. I present part of an analysis of the hackerspaces.org *Discuss* listserv to demonstrate these tensions and to discuss the impact they have on community norms and rules.

Author Keywords

Hackerspace; makerspace; fabrication cultures; community maintenance

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous

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Introduction

The popularity of makerspaces, hackerspaces, and similar fabrication communities has been rising in recent years. These spaces and groups have been valorized as the future of entrepreneurship and innovation within HCI [3], as loci of a unique and powerful form of education [2], and as the focus of a movement centered on democratizing the technological needs of everyday people [4]. Many of these spaces operate under a shared banner of community ideals that empower individual members with significant influence on how their community operates, often referred to by phrases such as “do-ocracy,” “consensus organization,” and “flat hierarchy.” As a result, the goals of many of these communities are constantly in flux, changing as their populations change and as new members join, each with their own conception for how such a group should operate. However, these fluctuating goals are rarely explicitly stated, but rather assumed to be shared. These assumptions lead to conflict when discussions arise about how the space should run, what policies should be formalized or left intentionally informal, or how a space should be presented to the public. In short, these communities are often not as similar as they set themselves up to be, and the nostalgic desire to share a genealogy with hacker and maker practices of old creates unnecessary

tension when they discuss their maintenance practices in the online spaces they happen to share.

In previous work that I and my colleagues have conducted in makerspace contexts [1, 5, 6], we have presented several facets of how makers and hackers develop their identities as situated within this space, including how they develop a sophisticated material sensibility [1], work toward adopting pragmatic attitudes [5], and develop complex, interpersonal relationships with members of their community [6]. The data for this work came from a 19-month ethnography of a hackerspace that seemed, for the majority of the time, to operate primarily as a place where friends could spend time with one another while sharing their interests and hobbies. However, even within that single site, maintenance conflicts arose as new members joined who wanted the space to be a “home base” for their startup. Once the casual community space was expected to perform in a manner concomitant with an office environment, communication and maintenance breakdowns became more apparent.

In order to further explore these maintenance practices and breakdowns, I am currently working on an analysis of hackerspace listserv discussions, linking my previous ethnography to a larger, global context and the problems that appear to be commonly shared between diverse spaces. In the following section, I present a small sample of discussions I have found in this analysis that speak to the growing tensions that can be traced to intersecting maker cultures and conflicting community ideals.

Hackerspaces.org Listserv Examples

The first example comes from a lengthy discussion about whether or not formalized policies should be implemented in hackerspaces—including safe space policies and anti-sexual-harassment policies. Arguments against implementing such policies in a formal way often claimed there was a significant risk of alienating or “artificially” altering the currently-existing community in that space.

“I think this whole discussion hinges on a very simple question. Why is it worthwhile to artificially promote a change in an existing community. If the answer is because the hackerspace should be inclusive to everyone, my answer is no, it should not be. By it's very nature it's already exclusionary. It's a hackerspace. Not a bake shop. Not a petting zoo. Not a race track. It has a specific focus, and by that it is already exclusionary. More to the point, hackerspaces are built around communities. And communities themselves are exclusionary. If you don't jive well with a community, you don't belong to that community, go find another one. If you think that your hackerspace can be home to all the peoples, you aren't building a hackerspace you are building a public library, and by all means enjoy the crackheads and good luck keeping that inclusive to everyone. Ask noisebridge how that went for them.”

This email went on to explain that promoting diversity along a specific axis makes sense “to an extent,” as long as it does not alter the culture that is already in that space. This individual also proposed that, while attempting to “enfranchise the disenfranchised” is a “grand and noble ambition,” it is bad for any particular hacking community because: 1) that is not what

hackerspaces are set up to support; and 2) hackers, developers, etc., are “not well people,” which he says partially as a joke and partially to argue that these kinds of people are not the kind of people who could understand the motivation to foster diversity in their community.

This thread received a wide range of responses. Many agreed with this poster, and were similarly unable to understand the systemic issues with their stances against implementing formalized policies, claiming that “everyone is welcome” and “be excellent to each other” should be sufficient community policies. Some confused the need for such formalized rules as signaling a deep problem in the community, and worried that outsiders would see the rules as signifying something negative within the group. Moderate voices argued, instead, that modeling appropriate behavior for the community was a much better stance, as it would skirt the issue of explicitly discussing anti-harassment or safe space policies, while ensuring that the community could behave positively. Finally, arguments in favor of formal policy pointed out that having a more explicit policy would signal to minority populations that their concerns were taken seriously by the group. Throughout all of these arguments there was a clear sense of concern for the health of the individual hackerspaces in question, but no consensus could be reached about how best to serve the community.

This tension was further demonstrated in a related discussion, where a member described two prominent, yet competing, models for how hackerspaces can be run: as public utilities, or as communities.

“At the same time there is the dichotomy of hackerspace as a public utility rather than as a community. My library is not a place I go to enjoy the company of my peers. It’s a place I go to get access to shared knowledge in the form of books. And that’s great. Some spaces may want to be ran as a public utility. I think the noisebridge model drove that direction. But some of the members never could let go of the idea of being a community and enjoying the benefits of that trust relationship. They couldn’t reconcile the divide between hackerspace as a public utility and hackerspace as a community. And I think at the core of this discussion is the question of whether or not these two views are irreconcilable.”

These potentially “irreconcilable” modes of operating as a hackerspace represent just a fraction of positions that hackers and makers have regarding how their communities can/should be organized, and each position is accompanied by a separate set of assumptions for the community’s management policies.

Conclusion

A hobbyist makerspace needs to focus on providing a relaxed atmosphere for people to hang out, mess around, geek out, etc. But a hackerspace focused on entrepreneurship and industrial manufacturing necessarily relies on a different set of rules, and a hackerspace focused on providing a public resource to its surrounding community relies on yet another rule set. At the time of this writing, participants in a discussion on the hackerspace.org *Discuss* listserv are attempting to resolve a personal dispute between two members of the same community. One side is advocating for enacting the rules as they are written

and agreed upon in the organization. The opposing side is advocating that rules should not be uncritically applied to every situation, but should operate as guidelines or principles that can be adapted depending on the context. This tension between strict adherence to rules or contextually applied rules draw from two different ethical traditions.

It is not the case that one ethical tradition is always more appropriate than the other for solving such disputes, but rather that *both* are appropriate, depending on the type of organization. An entrepreneurial hackerspace that focuses on revolutionizing industrial practices is more likely to benefit from a deontological ethical structure that can protect itself from liability by applying a set of rules evenly to the situations that are required. But a club or group of friends participating in hobbyist activities could not employ the same standard without straining exactly the kind of interpersonal relationships that maintain those communities and ultimately help them succeed.

The main problem with this tension is not that there exist clear divisions in these spaces between hobbyist, industrial, entrepreneurial, or public-utility forms of making, but that all of these often exist in an *ad hoc* system of formal and informal community policies and sanctions. When these intersecting fabrication cultures become difficult to distinguish, the communities that enact them struggle to implement policies that are sufficient to support their goals.

References

1. Jeffrey Bardzell, Shaowen Bardzell, and Austin Toombs. 2014. "now that's definitely a proper hack": self-made tools in hackerspaces. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '14). ACM, New York, NY, USA, 473-476. DOI=<http://dx.doi.org/10.1145/2556288.2557221>
2. Leah Buechley, Mike Eisenberg, Jaime Catchen, and Ali Crockett. 2008. The LilyPad Arduino: using computational textiles to investigate engagement, aesthetics, and diversity in computer science education. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '08). ACM, New York, NY, USA, 423-432. DOI=<http://dx.doi.org/10.1145/1357054.1357123>
3. Silvia Lindtner, Garnet D. Hertz, and Paul Dourish. 2014. Emerging sites of HCI innovation: hackerspaces, hardware startups & incubators. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '14). ACM, New York, NY, USA, 439-448. DOI=<http://dx.doi.org/10.1145/2556288.2557132>
4. Joshua G. Tanenbaum, Amanda M. Williams, Audrey Desjardins, and Karen Tanenbaum. 2013. Democratizing technology: pleasure, utility and expressiveness in DIY and maker practice. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI '13). ACM, New York, NY, USA, 2603-2612. DOI=<http://dx.doi.org/10.1145/2470654.2481360>
5. Austin L. Toombs, Shaowen Bardzell, and Jeffrey Bardzell. 2014. Becoming makers: Hackerspace member habits, values, and identities. *Journal of Peer Production*, 5.
6. Austin L. Toombs, Shaowen Bardzell, and Jeffrey Bardzell. 2015. The Proper Care and Feeding of Hackerspaces: Care Ethics and Cultures of Making. In *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (CHI '15). ACM, New York, NY, USA, 629-638. DOI=<http://dx.doi.org/10.1145/2702123.2702522>