"Taking Care of a Fruit Tree": Nurturing as a Layer of Concern in Online Community Moderation

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Abstract

Care in communities has a powerful influence on potentially disruptive social encounters. Practising care in moderation means exposing a group's core values, which, in turn, has the potential to strengthen identity and relationships in communities. Dissent is as inevitable in online communities as it is in their offline counterparts. However, dissent can be productive by sparking discussions that drive the evolution of community norms and boundaries, and there is value in understanding the role of moderation in this process. Our work draws on an exploratory analysis of moderation practices in the MetaFilter community, focusing on cases of intervention and response. We identify and analyse MetaFilter moderation with the metaphor: "taking care of a fruit tree", which is quoted from an interview with moderators on MetaFilter. We address the relevance of *care* as it is evidenced in these MetaFilter exchanges, and discuss what it might mean to approach an analysis of online moderation practices with a focus on nurturing care. We consider how HCI researchers might make use of care-as-nurture as a frame to identify multi-faceted and nuanced concepts characterising dissent and to develop tools for the sustainable support of online communities and their moderators.

Author Keywords
Care; online communities; moderation; empathy; community norms.

	2016	2017
general	200	0
deleted	100	0
mod[a]	100	335
overall[b]	523,571	416,416

Table 1: Overview of Comments Analysed by Each Coder

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[a]comments made by moderator's accounts, including comments for moderation use and general comments
[b]number of comments posted

Codes

▼ **Establishing authority**
  Calling out individuals
  Pulling a hard stop
▼ **Preventing conflicts**
  Referencing best practices
  Suggesting alternative venues
  Subtle guidance
▼ **Engaging the community**
  Personal perspectives
  Modelling best practices
▼ **Caring**
  Praise
  Transparency
  Being empathic
  Explicit care

Table 2: Established themes from MetaFilter moderators' comments in 2016-2017

CCS Concepts

•**Human-centered computing** → **Computer supported cooperative work;** *Collaborative and social computing systems and tools;*

Introduction

Online communities provide a social space for many different types of people with varied interests. Community norms depend on their needs regarding content structures and target audiences [16]. However, these needs can evolve depending on the stages of development online communities are in, which means that online communities have to enforce evolving norms. Dissent is omnipresent in online communities. Dissenters challenge existing norms and act according to values that contradict those of the majority of community members.

In early research on online communities in Human-Computer Interaction (HCI), disruption and dissent has mainly been approached as a problem to be solved. Bruckman et. al. define behaviour as "deviant" if it is not in accordance with community standards [3, 4, 6], while Kirman et. al. describe those who break the social contract in online community as being invested in "mischief and mayhem" [17]. Sternberg uses expressions such as "misbehaviour", similar to "misconduct" to refer to content that does not conform to community norms [27]. However, conflicts and dissent are not, per se, undesirable instances of engagement. Their value depends on how they are handled and how different perspectives are received or dismissed. For example, guidelines on Wikipedia break down conflict into productive and unproductive variants: the idea of an ad hominem attack (personal attack) can be used to differentiate undesirable behaviour from legitimate dispute. In some cases, mediators have worked to help conflicting parties to express, recognise, and respond productively to their personal and substantive differences [1]. Some online communities are explicitly designed around dissent, for example, the subreddit ChangeMyView[1] [28], ConsiderIt[2] [19] or the discussion platform Kialo [3]. These communities explicitly foster a "mindset of conversation" to online exchange, instead of zero-sum debate, and encourage constructive dissent with the goal to guide people through the process of understanding complex issues from a range of varied perspectives. Despite the above, the specific features of productive and unproductive dissent remain an open topic for study in online communities.

Moderation comprises a way to structure participation in a community to facilitate cooperation and prevent abuse [13, 16]. Online content moderation takes many forms including automatic filtering or review by human moderator(s)[13, 24]. Moderation of dissent can be seen as a kind of governance mechanism to shape community norms and structure participation in online communities. Our contribution is a report of our exploratory findings on moderation of MetaFilter[4], an online community with a 20-year track record of effective moderation [9, 25]. We show how MetaFilter moderators use **care** as a layer of concern to deal with dissent in their daily moderation work, in a way that balances reinforcement of existing norms with nurture for evolving norms.

Methods

MetaFilter is a 'community weblog' founded in 1999. While the site content is free to read, there is a $5 entrance fee that is required before users can post and make comments. A small team of seven moderators ensures constant moderation through a 24/7 staff rotation. Although paid, all mod-

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[1] https://www.reddit.com/r/changemyview/
[2] https://consider.it
[3] https://www.kialo.com
[4] https://www.metafilter.com

erators were long-time members of MetaFilter before they were hired and are immersed in community culture.

Our work draws from three complementary qualitative data sources from MetaFilter: comments on the website, interviews with MetaFilter moderators and a discussion with MetaFilter members. The study was conducted and designed in accordance to the Department of Computer Science, University of Bath's ethics checklist (2017 version[5]).

Comments
We first thematically analysed moderated comments in a corpus of MetaFilter data spanning the years 2016 and 2017[6] (see Table 1) [2]. Two authors used the dataset from 2016 to explore the overall MetaFilter comment base and to identify initial codes and themes for a range of different comment types (200 general, 100 deleted and 100 moderator comments for each). Two authors then each coded a random subset of 335 comments made by moderators in 2017 individually, then established themes stemming from the combined 2016 and 2017 data. We found that our initial codes from 2016 applied to data in 2017 as well, so we deemed the data to be saturated. While the coding and analysis was done on the level of individual comments, we considered the context of these comments by revisiting the associated threads to understand better the intent of a moderation intervention.

Interview
After analysing these comments, we conducted three two-hour long additional interviews with moderators via text-based chat, and one structured interview with follow-up questions via email according to participants' preferences.

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[5] http://www.cs.bath.ac.uk/Leon/pages/ethics.shtml
[6] In 2019, MetaFilter had many explicit discussions on oppressive systemic tendencies within the community. These are not part of our previous research, but will be investigated separately.

MetaFilter in 2017 employed seven staff members, including the site owner, who also acts as a moderator, and one coder. Our four participants volunteered after a general inquiry towards all MetaFilter staff members. While all seven currently active moderators were asked to be interviewed, two of them declined due to time-constraints and one only helps out sporadically. During the interview, we touched on participants' connection to the site, how they structure their collaborative environment, as well as personal strategies for moderation and how these tie in with their experiences with the community. As per request, we are using their MetaFilter handles to identify them as interviewees [5].

Online Discussion with Members
To gather our final dataset, we used MetaTalk, a subsite of MetaFilter, to discuss moderation on MetaFilter with community members. On 26 March 2018, we posted a general summary of our comment analysis along with a few high-level open questions to start the conversation. We reminded users that their comments could be potentially quoted in publications. Until its closing date on 26 April 2018, the thread consisted of 132 comments from 94 unique participants. Additionally, we received several private emails. Current moderators refrained from commenting other than to clarify open questions or to respond when explicitly asked. However, retired moderators engaged with the conversation freely.

Findings: *"Taking Care of a Fruit Tree"*
Through our analysis of moderation on MetaFilter, we found moderators bringing *care* as a layer of concern into their daily moderation work (see all themes in **Table 2**). For maker/contributor communities, Toombs et al. argue that care is a key driver for sustainability [29]. Taking care implies feeling responsible for initiating and maintaining caring activities [10]. It also requires work of the entire community

"Rhetoric gets sharper and hotter faster. People get visibly more angry, quicker, in conversations and arguments." – cortex

"Generally we try to assume the best of people, and extend the benefit of the doubt that people can change, that having a bad day once is something that happens, etc." – LobsterMitten

"I felt like people needed a positive outlet because there was so much politics ugliness, and I love threads that are like 'show us your desk!' or 'show us your purse!' so I started doing those." – Eyebrows McGee

"The guiding philosophy was: hands-off, wait and see, trust people to work it out; mods should intervene as more of a last resort. Gradually over many years of community discussion, we've come to a position where (many) members expect offensive comments will get deleted immediately... We try to strike the best balance we can." – LobsterMitten

Sidebar 2: Quotes from interviews with moderators on MetaFilter

to maintain the value of their exchanges, which means it is not advisable to leave this responsibility to a small group of powerful key players [31]. In one of the interviews, a moderator used the following metaphor to refer to their work:

> *"[T]he metaphor would be taking care of a fruit tree. You want it to grow and bloom and bear fruit, so one of the things you have to do is prune it to keep it healthy, but you also have to water it and protect it feed it and so on. (...) It also means you aren't JUST reactive, you're also proactive, and you think about how the forum you're creating will help or hinder the community. "* – Eyebrows McGee

This metaphor shows one moderator's mental model for how they make sense of their role on MetaFilter – taking care of a fruit tree – and helps explain their strategies for action in moderation [8, 30]. Hence, moderators perform care by attending to the community and actively shaping it, not only through the deletion of undesirable content (or removing harm), but also through the addition of desirable comments (or providing an opportunity for growth). Sidebar 1, which shows examples for moderator comments on MetaFilter, and Sidebar 2, which includes quotes from interviews with moderators on MetaFilter, both support the idea that the broader set of moderators share this strategy of care as a layer of concern in moderation and that it helps them actively maintain and shape norms on MetaFilter. Through these actions, their practices follow the normative goals of care ethics [20].

Pruning for Reinforcing Existing Norms
We identified two specific strategies used by MetaFilter moderators–"pruning" and "fertilising" – which help reinforce existing as well as evolving norms on MetaFilter. This

notion of care in moderation can be then understood as a matter of nurturing for sustainable community growth.

With quotes from interviews with MetaFilter moderators, we see that moderators take careful measures to shape the discourse and content on the site and use multi-directional trust as their conceptual basis for moderation. Such initiatives actively shape site culture and establish as well as re-affirm the community-feel. These also exhibit a notion of active care for the community. In our analysis, we found that moderators of MetaFilter bring care into their practices while pruning for reinforcing community norms, as an attitude towards the tone and intent of their interventions, be they formally or informally framed. For example, praising and showing empathy to members reinforces the validity of their contributions or the concerns they raise (see Table 2). In many instances, moderators put in proactive work to avoid having to take drastic measures by, for example, using formal moderation tools, and may in addition contact the member to explain the thought process behind the decision and point to potential alternative strategies. Per example 2 in Sidebar 1, M3 wrote a comment to provide subtle guidance for appropriate behaviour, but chose not to use the official moderator comment format; this emphasises the moderator's role as an established community member first and an official moderator only when necessary[7]. It also shows that activities as moderators are shaped by a fundamental trust in the member base, even when they encounter less ideal behaviour. On the other hand, moderators actively frame their work as mostly dealing with a minority of members which might not necessarily represent the community at large (see quote 2 in Sidebar 2). Being careful about how and what to "prune" from the community is paramount, and balancing their positions as respected community members

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[7]Official moderation comments appear [in small type, in square brackets] on MetaFilter

with making transparent decisions about small scale cases is important but challenging [14].

Using *care* in reinforcing existing community norms does not refer just to pruning. It inhabits a super ordinate layer of concern permeating every decision moderators make even in, for example, giving compliments, praising content and providing comfort to members (see examples in Sidebar 1). Caring attitudes in online communities encourage committed engagement and can positively contribute to the reinforcement of norms by regulating what is appropriate and inappropriate for a given online community [22, 26]. Moderators on MetaFilter visibly demonstrate norm-appropriate behaviours through modelling care themselves, to encourage their members to take care of each other.

Fertilising Towards Norms Evolve
Beyond actively shaping the content and discussion culture on the site, moderators' careful attitude also helps in growing the community. Moderators on MetaFilter regularly discuss their moderation with members (see last quote in Sidebar 2). Through discussion with the community, moderators identified the need for more positive banter for their members (see quote 3 in Sidebar 2). The increasing frequency of contentious, extensive and rapid discussions on daily political developments had increased moderators' workload substantially and began to dominate their work (see quote 1 in Sidebar 2). They decided to schedule weekly social threads around light topics such as local foods and uncommon habits on MetaFilter's associated MetaTalk site. In this case, MetaFilter moderators performed care by attending to the health of their community by taking action aimed at integration[8]. Hence, active care

can been seen not only in practices surrounding the removal of undesirable content not capable with existing community norms, but also in actively providing the ground for desirable alternative engagements in order to assist the health and growth of community norms. It also speaks to the relevance of their direct personal involvement, which helps them be more aware of existing tensions, as a complement to their status as moderators.

Care-As-Nurture for Online Communities
Within HCI and CSCW the intricacies of care have been analysed, e.g., in the context of maker spaces [29], in learning environments [15], and in IT security [18]. Care provides a useful lens into computer mediated human interactions. In online communities, moderators perform care by attending to the community and actively shaping it not only through the deletion of undesirable or unacceptable content, but also through the addition of desirable and supporting content. Through these actions, their practices follow the normative goals of care ethics [20]. This care is deeply reflected in their community norms, which they carefully maintain and develop. Because of this, we further position our notion of care in moderation as a matter of nurture to emphasise that the sustainability of any online community requires attention to growth and change in the membership base.

Care provides a meaningful framing concept as a *proactive* approach to moderation, a type of approach that has been addressed in less depth than *reactive* ones [23]. Exhibiting care in moderation practices means acknowledging how maintenance, health and protection are inadequately safeguarded by purely reactive work. This suggests that there is much space for designers to increase the social nuance of approaches to moderation, which often rely only on detecting and flagging, hiding or removing undesirable actions

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[8]A few months before writing this piece, MetaFilter decommissioned these "mega-threads". See https://metatalk.metafilter.com/25265/Decommissioning-the-US-politics-megathreads

after they have occurred. We see care-as-nurture as a way of highlighting desirable emergence and expansion of member exchanges, particularly in complex situations that require nuance, finesse, tact and, of course, care. Caring for something entails a normative notion of supporting growth and development, including removal of obstacles for growth and provision of nourishment in whatever form is required [20]. Blanket suppression of dissent can itself be seen as an obstacle to growth, and can take away attention from efforts focused on engaging, contributing and maintaining a community [7, 22]. In effective moderation, actions are need both to encourage dissenting, often otherwise-marginalised perspectives as well as to reinforce norm-aligned conduct. Moderators' awareness and skill in navigating these tensions productively likely depends on an atmosphere of mutual respect and trust as core qualities of interaction between all members, including moderators [21]. Nurturing care as an attitude for all participants therefore speaks powerfully about active maintenance. The long-term viability of a community requires initiating and supporting its ability to grow and evolve over time.

Conclusion & Future Work

In our study, we found *care* ethics was embedded in MetaFilter moderators' approaches to moderation. They structure their work using care-as-nurture as a concern in moderation. We present our analysis by profiling the metaphor "taking care of a fruit tree" into 'pruning' and 'fertilising' to support 'care-as-nurture' for sustainable community growth with moderation. We conclude that dealing with dissent carefully will help online communities shape community norms more actively and effectively, supporting the evolution of norms alongside community members' empathy. This stance is key for motivating members to commit to the community. Therefore, practices in moderating online content go beyond "commenting promotion, deletion, and control" [11].

Moderators act not just as "custodians" of a community [12], but instead comprise an integral aspect of forming, shaping, developing and negotiating its identity.

Through our study with MetaFilter moderation, we see that one of main challenges in online community moderation is how to deal with dissent in a way that balances reinforcing existing norms with nurturing their evolution over time. We also see that moderators on MetaFilter try to encourage different perspectives. In our current work, we are investigating additional moderation strategies and gathering related accounts from moderators and members in order to generate an integrated account of moderation practices informed by the concept of care. We are assembling a new dataset based on recent developments on MetaFilter, where the community has worked together to establish guidelines that are more welcoming to marginalised communities. In our future studies, we will study how specific cases of dissent in MetaFilter are handled by the moderators, and how applying careful moderation may help dissent to constructively shape community norms, particularly in recent discussions on issues of race[9] and ableism[10] within the community. Our future work will consider more deeply in the context of concepts of care in HCI/CSCW [15, 18, 29]. We intend to use a mixed method approach to investigate how dissent, moderation, and community norms interplay on MetaFilter, and to inform the design of care-oriented tools encouraging constructive dissent building on a notion of care-as-nurture in moderation.

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[9]e.g., https://metatalk.metafilter.com/25222/Is-it-time-to-retire-outragefilter-as-deletion-reason

[10]e.g., https://metatalk.metafilter.com/25272/Anxiety-depression-ADHD-autism-bipolar-and-other-neurodivergences-on-MeFi

REFERENCES

[1] Matt Billings and Leon A. Watts. 2010. Understanding Dispute Resolution Online: Using Text to Reflect Personal and Substantive Issues in Conflict. In *Proc. of the SIGCHI Conference on Human Factors in Computing Systems (CHI '10)*. ACM, New York, NY, USA, 1447–1456. DOI: http://dx.doi.org/10.1145/1753326.1753542

[2] Virginia Braun and Victoria Clarke. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3, 2 (2006), 77–101. DOI: http://dx.doi.org/10.1191/1478088706qp063oa

[3] Amy Bruckman, Pavel Curtis, Cliff Figallo, and Brenda Laurel. 1994. Approaches to Managing Deviant Behavior in Virtual Communities. In *Conference Companion on Human Factors in Computing Systems (CHI '94)*. ACM, New York, NY, USA, 183–184. DOI: http://dx.doi.org/10.1145/259963.260231

[4] Amy Bruckman, Catalina Danis, Cliff Lampe, Janet Sternberg, and Chris Waldron. 2006. Managing Deviant Behavior in Online Communities. In *CHI '06 Extended Abstracts on Human Factors in Computing Systems (CHI EA '06)*. ACM, New York, NY, USA, 21–24. DOI: http://dx.doi.org/10.1145/1125451.1125458

[5] Amy Bruckman, Kurt Luther, and Casey Fiesler. 2015. When Should We Use Real Names in Published Accounts of Internet Research? *Digital Research Confidential: The Secrets of Studying Behavior Online (2015)* 243 (2015).

[6] Amy S. Bruckman, Jennifer E. Below, Lucas Dixon, Casey Fiesler, Eric E. Gilbert, Sarah A. Gilbert, and J. Nathan Matias. 2018. Managing Deviant Behavior in Online Communities III. In *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems (CHI EA '18)*. ACM, New York, NY, USA. DOI:http://dx.doi.org/10.1145/3170427.3186319

[7] Brian Butler, Lee Sproull, Sara Kiesler, and Robert Kraut. 2002. Community effort in online groups: Who does the work and why. *Leadership at a distance: Research in technologically supported work* 1 (2002), 171–194.

[8] Stevie Chancellor and Joseph Seering. 2019. "Gardener" or "Janitor": The Metaphors that Describe Volunteer Moderator Work Practices. In *CSCW'19 Workshop - VolunteerWork: Mapping the Future of Moderation Research*.

[9] Eshwar Chandrasekharan, Mattia Samory, Anirudh Srinivasan, and Eric Gilbert. 2017. The Bag of Communities: Identifying Abusive Behavior Online with Preexisting Internet Data. In *Proc. of the 2017 CHI Conference on Human Factors in Computing Systems (CHI '17)*. ACM, New York, NY, USA, 3175–3187.

[10] Berenice Fisher and Joan Tronto. 1990. Toward a feminist theory of caring. *Circles of care: Work and identity in women's lives* (1990), 35–62.

[11] Eric Gilbert, Cliff Lampe, Alex Leavitt, Katherine Lo, and Lana Yarosh. 2017. Conceptualizing, Creating, & Controlling Constructive and Controversial Comments: A CSCW Research-athon. In *Companion of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing (CSCW '17 Companion)*. ACM, New York, NY, USA, 425–430.

[12] Tarleton Gillespie. 2018. *Custodians of the Internet: Platforms, content moderation, and the hidden decisions that shape social media*. Yale University Press.

[13] James Grimmelmann. 2015. The virtues of moderation. *Yale JL & Tech.* 17 (2015), 42.

[14] Shagun Jhaver, Amy Bruckman, and Eric Gilbert. 2019. Does Transparency in Moderation Really Matter? User Behavior After Content Removal Explanations on Reddit. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW, Article Article 150 (Nov. 2019), 27 pages. DOI:http://dx.doi.org/10.1145/3359252

[15] Naveena Karusala, Aditya Vishwanath, Arkadeep Kumar, Aman Mangal, and Neha Kumar. 2017. Care as a Resource in Underserved Learning Environments. *Proc. ACM Hum.-Comput. Interact.* 1, CSCW, Article Article 104 (Dec. 2017), 22 pages. DOI:http://dx.doi.org/10.1145/3134739

[16] Sara Kiesler, Robert E. Kraut, Paul Resnick, and Aniket Kittur. 2012. Regulating Behavior in Online Communities: Evidence-Based Social Design. *Building Successful Online Communities* (2012), 125–178.

[17] Ben Kirman, Conor Lineham, and Shaun Lawson. 2012. Exploring Mischief and Mayhem in Social Computing or: How We Learned to Stop Worrying and Love the Trolls. In *CHI '12 Extended Abstracts on Human Factors in Computing Systems (CHI EA '12).* ACM, New York, NY, USA, 121–130. DOI:http://dx.doi.org/10.1145/2212776.2212790

[18] Laura Kocksch, Matthias Korn, Andreas Poller, and Susann Wagenknecht. 2018. Caring for IT Security: Accountabilities, Moralities, and Oscillations in IT Security Practices. *Proc. ACM Hum.-Comput. Interact.* 2, CSCW, Article Article 92 (Nov. 2018), 20 pages. DOI:http://dx.doi.org/10.1145/3274361

[19] Travis Kriplean, Jonathan T. Morgan, Deen Freelon, Alan Borning, and Lance Bennett. 2011. ConsiderIt: Improving Structured Public Deliberation. In *CHI '11 Extended Abstracts on Human Factors in Computing Systems (CHI EA '11).* ACM, New York, NY, USA, 1831–1836. DOI:http://dx.doi.org/10.1145/1979742.1979869

[20] Tove Pettersen. 2011. The Ethics of Care: Normative Structures and Empirical Implications. *Health Care Analysis* 19, 1 (2011), 51–64.

[21] J. Preece and B. Schneiderman. 2009. The Reader-to-Leader Framework: Motivating Technology-Mediated Social Participation. *AIS Transactions on Human-Computer Interaction* 1, 1 (2009), 13–32.

[22] Yuqing Ren, Robert E. Kraut, Sara Kiesler, and Paul Resnick. 2012. Encouraging Commitment in Online Communities. *Building Successful Online Communities: Evidence Based Social Design* 3 (2012), 77–124.

[23] Joseph Seering, Tianmi Fang, Luca Damasco, Mianhong 'Cherie' Chen, Likang Sun, and Geoff Kaufman. 2019a. Designing User Interface Elements to Improve the Quality and Civility of Discourse in Online Commenting Behaviors. In *Proc. of the 2019 CHI Conference on Human Factors in Computing Systems (CHI '19).* ACM, New York, NY, USA, Article 606, 14 pages. DOI:http://dx.doi.org/10.1145/3290605.3300836

[24] Joseph Seering, Tony Wang, Jina Yoon, and Geoff Kaufman. 2019b. Moderator engagement and community development in the age of algorithms. *New Media and Society* (2019). DOI:http://dx.doi.org/10.1177/1461444818821316

[25] Leiser Silva, Lakshmi Goel, and Elham Mousavidin. 2009. Exploring the dynamics of blog communities: the case of MetaFilter. *Information Systems Journal* 19, 1 (2009), 55–81.

[26] Christine B. Smith, Margaret L. McLaughlin, and Kerry K. Osborne. 1997. Conduct Control on Usenet. *Journal of Computer-Mediated Communication* 2, 4 (1997), 0–0.

[27] Janet Sternberg. 2000. Virtual Misbehavior: Breaking Rules of Conduct in Online Environments. *Proceedings of Media Ecology Association* 1 (2000), 53–60.

[28] Chenhao Tan, Vlad Niculae, Cristian Danescu-Niculescu-Mizil, and Lillian Lee. 2016. Winning Arguments: Interaction Dynamics and Persuasion Strategies in Good-faith Online Discussions. In *Proc. of the 25th International Conference on World Wide Web (WWW '16)*. International World Wide Web Conferences Steering Committee, Republic and Canton of Geneva, Switzerland, 613–624. DOI: http://dx.doi.org/10.1145/2872427.2883081

[29] 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.

[30] Karl E Weick. 1995. *Sensemaking in organizations*. Vol. 3. Sage.

[31] Bingjie Yu, Katta Spiel, and Leon Watts. 2018. Supporting Care as a Layer of Concern: Nurturing Attitudes in Online Community Moderation. In *CSCW'18 Workshop - Sociotechnical Systems of Care*.