# Mind the Gap: Differences between the Aspirational and the Actual in an Online Community of Learners

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**Abstract:** This paper explores the differences between the *aspirational* (what designers desire) and the *actual* (what participants do) in an online learning community of young people, using the Scratch website as a case study. Interviews with members of the MIT Scratch Team and two years of ethnographic observation of the site inform the discussion of these differences. The paper presents four tensions that arise between the aspirations for this community of learners and the realities of actual participation: (1) enabling exploration of the personal vs. pitfalls of the personal, (2) fostering meaningful interactions with others vs. lack of respect, (3) supporting diverse creative expression vs. conflicts in interests, and (4) encouraging a sense of group belonging vs. seeking attention.

## Scratch: An Online "Community" of Learners

Scratch (http://scratch.mit.edu) is a programming environment that makes it easy to create interactive media (including stories, games, and simulations) and share those creations online. Scratch follows in the constructionist tradition – an approach to learning that is grounded in the belief that the most effective learning experiences grow out of the active construction of all types of things, including the construction of computer programs (Kafai & Resnick, 1996; Papert, 1991). The Logo programming environment (developed by Seymour Papert and a team of researchers at MIT in the 1960s) is a significant predecessor to Scratch and has been a major influence on its development. One of the ways in which Scratch has extended the Logo work is in its insistence on the social aspects of learning, most obviously through the creation of the Scratch website.

The Scratch website, launched in May 2007, has become extremely active, with more than 650,000 registered members sharing, discussing, and remixing one another's Scratch projects (Resnick et al., 2009). Each day, members (mostly ages 8 to 16) upload approximately 1500 new Scratch projects to the website – on average, a new project every minute. The collection of projects is incredibly diverse: interactive newsletters, science simulations, virtual tours, animated dance contests, step-by-step tutorials, and many others, all programmed with the Scratch environment and its graphical programming blocks.

Inspired by Papert's Mindstorms, the website draws on the samba school model, where people of all ages come together with shared goals, to support each other's learning and collaborate on endeavors that are more substantial than could be achieved individually (Papert, 1993). More broadly, theories about communities of practice and situated learning have provided ways of thinking about how community settings can support the learning of a practice – by providing learners access to others and opportunities to explore the activities, artifacts, and ideals of the practice (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991). Accordingly, in addition to enabling people to upload their projects, the site was designed with features typical of community-based content-creation sites like Flickr and YouTube. Members can leave comments on projects, annotate projects with tags, indicate admiration of projects by clicking the *Love It* link, and bookmark others' projects in a list of favorites. Members can also mark other members as friends, create galleries or collections of projects with others, and participate in discussion forums. Each member has a profile page that displays their alias and country, as well as their contributions and interactions – lists of projects, favorites, friends, and galleries.

When asked to describe our work, I usually share a mostly unproblematic narrative about the Scratch website, which we call the Scratch online community. This narrative, at least superficially, seems to make appropriate use of the term community – over the past three years, hundreds of thousands of young people from around the world have joined and have created more than 1.4 million interactive stories, games, and animations. As designers, we use community to express what we desire for – and from – participants in the technology/environment we have designed, and I less frequently discuss the ways in which the label of community might be a mismatch for the activities we observe on the site.

This mismatch of language – the aspirational use of words to create feelings, thoughts, and actions that do not yet (or may never) exist – is obviously not particular to Scratch. It is a side effect of the main activities of designers: bringing possibility to reality, bringing the aspirational to the actual. In this paper, I explore the difference between the aspirational and the actual in the design of online communities, using the Scratch online community as a case study with designer perspectives and participant observations. What are we thinking about when we say *community*? What should the word *community* indicate about the design? How are our intentions supported or undermined by the design? How are the design and our intentions taken up, appropriated, subverted, and transformed by members?

To explore these questions, I conducted interviews with a subset of the MIT Scratch Team known as *metamods*, a sub-group of four people (including myself) that focuses on issues that take place on the Scratch website. The metamods meet weekly to discuss technical extensions (e.g. designing features that limit the impact of spammers) and social extensions (e.g. designing new themed activities for members) to the site, as well as to discuss significant events that have taken place on the site over the week. These interviews and two years of ethnographic observation of the Scratch website were coded to form the basis of the following discussion that explores the gap between the aspirational and the actual in the design of the Scratch online community.

### What Does (or Should) the Word "Community" Indicate?

Community is a complicated word – and is made more complex in its translation to the virtual (Bruckman, 2006; Feenberg & Barney, 2004; Rheingold, 2000; Smith & Kollock, 1999). Rather than start with definitions of community from sociology, psychology, or other disciplines, I started the interviews by exploring individual understandings of this word. One metamod described community as something that needs to be explicitly acknowledged by its members:

People, a place (either virtual or physical), and a sense of belonging by those people who claim to be part of the community. I think people have to be aware, or even explicitly say, that they are part of a community, in order for that community to exist. (Metamod #2)

Another described community as a set of relationships and collaborations, emphasizing the interconnection between people:

It's a space where you create relationships and collaborate on different aspects having to do with our lives. To me it is a bunch of people, who are generally in a similar space, who get to have space, time to talk about whatever is relevant and real. They get to perform a lot of different roles for each other – confidante, friend, therapist. (Metamod #3)

Whereas this framed community as activities supporting relationships, another metamod emphasized relationships (or interactions) supporting activities:

I think about a group of people who share something. What range of things might they be sharing? Something where they either share some activities together, some values together, some goals together. I guess I would typically think it's a collection of people that have various forms of interactions in support of those shared goals, activities, or values. (Metamod #1)

The metamods' individual framings of community overlap along (although differently emphasize) several dimensions – individual, interaction, sharing, group – which leads to a working definition of community: people who intentionally gather together and interact to pursue shared goals and interests. When asked how this definition of community changes online, metamods talked about how the overall framing and dimensions are the same, but are hindered by communication barriers. It is harder to form intimate interactions, to collaborate as seamlessly, and to express as much as quickly in an environment that lacks non-verbal cues, is asynchronously mediated, and relies primarily on text and images. The nature of online community also provides benefits – connecting with people at a distance and connecting with a much larger, (hopefully) more diverse group of people.

But how do the goals of Scratch and the Scratch website connect with these ideas about community? The overarching constructionist goal of enabling people to have meaningful learning experiences through acts of construction – and, as extended by Scratch, situated in explicitly social environments – can be further articulated into four sub-goals or aspirations: (1) enabling exploration of the *personal*, (2) fostering meaningful *interactions* with others, (3) supporting *diverse* creative expression, and (4) encouraging a sense of group *belonging*. I now discuss each of the aspirations, describing – with vignettes and interview excerpts – the ways in which the *actual* deviates from the *aspirational*.

#### Aspiration: Enabling Exploration of the Personal / Actual: Pitfalls of the Personal

Computational creation has long been perceived as the domain of a select few, based on gender and epistemological approach (Turkle & Papert, 1990). Scratch aims to broaden the demographic of computational creators, both through technical aspects of the programming environment (e.g. drag-and-drop puzzle-piece-like programming elements that are well-suited to a bricoleur or tinkering approach) and through particular approaches to pedagogical design (e.g. recommending and modeling activities such as collaborative storytelling). Thus, instead of designing activities exclusively framed and focused on implementing certain

algorithms or using particular computational concepts such as variables, we encourage young people to work on projects (and suggest that educators design activities) that connect to these concepts via personal interests. For example, creating a project that is an interactive representation of your name or a project about a place you have always wanted to visit or a project about an issue that is important to you. The community should be a place where the personal is explored – but there are pitfalls in exploring the personal online.

Eagle3522 is a 14-year-old girl who creates a Scratch project about the problems that she is currently experiencing in her life. She writes about how she hopes the act of creation will be cathartic, "I've had a lot on my mind lately, and that's why I made this to kind of try to get it off of my mind." In the project, she shares fights with her mother, information about her famously incarcerated father, and her depressive thoughts. She receives a mix of supportive and critical comments on her project. She quickly deletes her project, so that it is not visible to the community.

Jacky is a 10-year-old girl who loves ferrets. She creates a series of projects about her favorite animal and the series becomes wildly popular within the Scratch community. She misbehaves and is blocked from accessing the site for a brief period of time. When she returns, she decides that she no longer wants to be defined exclusively by her ferret projects and she deletes all of them, hoping to reimagine her representation and participation.

SonestaMiku is a 14-year-old girl who is active on Scratch, as well as on other media creation sites. She is careful not to share too much personal information on Scratch, but reveals more about her personal interests – and personal life – on these other sites. A friend on Scratch is slighted by SonestaMiku. The friend creates a Scratch project that reveals SonestaMiku's personal information and shares it on the Scratch site. SonestaMiku is furious about this violation and demands that the friend's account be permanently blocked.

All three creators in these vignettes used media creation to express their interests and to share and perform aspects of their identities. But all three were forced to confront key questions. What types of personal things are suitable for public consumption? With Eagle3522, the intimate sharing of troubled family life and depressive thoughts became too public. How does public consumption change what is personal? With Jacky, the heightened status and visibility of her personal interest was taken on by the community in a way that completely defined her and left her unable to negotiate her self-representation. Who owns the personal? With SonestaMiku, the imaginary border around the personal was crossed, and was used against her as a form of sanctioning.

From the metamods perspective, the public-personal is full of contradiction. Exploring the personal is a valuable context for developing as a computational creator, but raises questions about safety – both emotional safety (e.g. the vulnerability of sharing personal problems) and physical safety (e.g. the vulnerability of sharing geographic or contact information). In addition to these questions, there are questions about development. Sharing personal creations publicly in an archive leaves an important trace or record of one's interests and development, but a possibly limiting self-representation. One metamod described this tension, that in our desire to maintain a complete archive we might be losing something valuable:

We haven't thought about obsolescence, that things need to die. There's some use to having things fade away – and become the humus that we then plant new seeds in. (Metamod #3)

Connecting to and sharing the personal in an online archive is complicated. The personal becomes public and is never forgotten – the desire for *representation* is impinged upon by *visibility*.

#### Aspiration: Fostering Meaningful Interactions with Others / Actual: Lack of Respect

Creativity is a social process (Sawyer, 2006). It resides not solely in the individual, but through interaction with others. This is a significant reason why the Scratch website is inspired by models of online social networking and community sites, not just models of repositories or archives. Some features of the site were designed explicitly to foster interactions between members. For instance, comments are used to give feedback to others, friending is used to keep track of what others are doing, and forums are used to give and get help with projects. Other features have been unexpectedly appropriated by members for interactions. For instance, the location field is used to give status updates (in a Twitter-inspired fashion) instead of geographic position, and galleries are used as dedicated chat spaces where members flirt. But as with any interactions between people, these interactions are not always positive or respectful.

Suziescape9 is 17-year-old girl who has been creating animations with Scratch for more than two years. She is thoughtful in her creations and her interactions with others. Her work is appreciated by other community members, but positive attention is accompanied by some negative attention. After a particularly thoughtless set of comments, she decides to stop creating projects, which she sees as attracting attention from people she describes as "trolls."

Greg is a teacher who is introducing Scratch to students at his school. He helps them create accounts on the Scratch site and reminds them that shared artifacts are publicly visible. One of his students posts a comment on a stranger's Scratch project, calling it "stupid." The stranger returns the insult, using expletives to describe

the student's project. The student is very upset by the exchange. Other teachers find out about it and confront Greg about putting students at risk. Greg feels terrible about what has happened. He sees great benefit in sharing one's work with others online, but the episode has "tarnished" the reputation of the Scratch online community at his school. The students continue to create projects, but no longer share them online.

LiveVictor is a 15-year-old boy who enjoys antagonizing Scratchers whose projects appear on the front page of Scratch. With one Scratcher, he acts as a spammer, leaving numerous gibberish comments on her projects to distract her from other, more productive, comments. With another, he causes panic by pretending to have medical expertise, convincing her that a minor medical issue indicates major future medical problems. After several months of problematic participation, he decides to leave Scratch and makes a project about his departure. In it, he apologizes quite sincerely to those he has harassed and been disrespectful toward. He asks his victims for forgiveness and they accept his apology, and he parts on good terms.

These vignettes illustrate the different reactions members have toward disrespectful interactions. Some are alienated from their creative practices, either entirely like Suziescape9 or partially like Greg and his students. Others accept disrespectful interactions as part of socially-situated creative practices, and learn how to strike back, to just ignore, or – as in the case of LiveVictor's targets – eventually make reparation.

Problematic interactions between members are always a topic of conversation at metamod meetings. One metamod, who deals with complaints from community members and also manages moderators who deal with reports, is particularly focused on ways of responding to disrespectful interactions. He views one of his most significant contributions as creating a safe space where creative practices can flourish:

I've seen that one of the important things I do is to create safety, in a sense. I think that community is an emergent phenomenon – it's something that creates itself. You give people the right kind of context, and they start to create new ideas, and share them, and grow them. But that starts to break down when something becomes unsafe, when people feel threatened or they feel attacked. They contract into this posture that's very defensive, basically, and there's less of the sharing, growth, and interesting phenomena that I like to see happen. So, I do that by removing threats or really disrespectful content. (Metamod #3)

Another metamod acknowledged that there was more that could be done in a proactive fashion to encourage community-appropriate interactions – rather than re-establishing a sense of safety *after* a negative interaction occurs between members:

There are people who don't show, in my mind, appropriate respect for others in the community. It's not that it's set up in a way that there's necessarily as high a level of respect among people in the community that I would think would be ideal. And one could imagine certain communities do more to support that level of respect. Everything from certain initiation routines and rituals that help people get a better understanding of the values of the community, which I don't think there's a lot of in the Scratch community. (Metamod #1)

For example, it is currently quite easy to join the community. An applicant fills out a simple form, specifying a username, password, birth date, email, gender, and country. There is no other text on the page that indicates what the individual can do with the account or what expectations exist regarding participation. Those expectations are shared in the Scratch community Terms of Use, which are accessible as a link at the bottom of the page, wedged between "Download | Donate | Privacy Policy" and "Copyright Policy | Contact Us." The Terms of Use (http://info.scratch.mit.edu/Terms\_of\_use) are expressed as six expectations: (1) Be respectful, (2) Offer constructive comments, (3) Give credit, (4) Be honest, (5) Keep personal information private, and (6) Help keep the site friendly. Important (perhaps even commonsense) ideas, but members are usually only exposed to the terms after the terms have already been violated.

Routines and rituals to clarify expectations about participation would help new members better understand this new environment – and clear communication of expectations seems even more important in an online space where communication is already challenging (as described earlier). Many come to online spaces with an exaggerated sense of invincibility afforded by anonymity, often behaving in disrespectful ways that they would not in real life. Thus, feelings of *safety* within the existing community are impinged upon by the *anonymity* of the not-yet-enculturated individual.

#### Aspiration: Supporting Diverse Creative Expression / Actual: Conflicts in Interests

When describing the aspirations of Scratch, we frequently use the metaphor of a room (Resnick & Silverman, 2005). We want Scratch to have a *low floor* – it should be very easy for anyone to get started creating things with Scratch. We also want Scratch to have a *high ceiling* – people should be able to create projects of arbitrary complexity and not be limited by the easy beginnings. Finally, we want Scratch to have *wide walls* – people should be able to create a wide range of projects, from adventure stories to role-playing games to science

simulations, not just a single type or genre of project. While we see members experimenting with different genres of projects, many members tend to focus on a particular genre, which varies most obviously according to gender and age.

Dvora160 is 14-year-old boy who is opposed to (what he perceives as) the superficiality of animation or other aesthetically-focused projects. He and others are adamant about the primacy of programming in Scratch and argue that technically-sophisticated projects should be valued most highly in the community. He creates a protest project, encouraging people to boycott all animation projects and calling for a return to a programming focus.

Ashleigh\_Jaguar is a 16-year-old girl who is a passionate animal rights activist. She creates a Scratch project that includes graphic photos of animals being mutilated in product and drug testing. She posts the project and encourages others to support her in the animal rights cause. A young Scratcher views the graphic content and is scared. His parents contact the Scratch Team, which then removes the content, explaining that the content was too intense for the broad Scratcher age range. She defiantly re-posts the project, stating that the truth of animal testing is too important for the Scratch Team to ignore or suppress.

Zaw is a 15-year-old boy who disdains Scratch's core values of personal expression and computational creation. He wants to destroy the Scratch community. He decides to recruit members to join an army that will systematically drive people away from Scratch. Members of the army are encouraged to post negative comments on people's projects until the creators leave Scratch. His negative attitude and scare tactics incite members who care about the Scratch community and its core values. Zaw is eventually banned from the community, but his army's presence lingers through old comments on projects, occasionally causing panic in those who fear the return of Zaw.

Members are passionate about their genres, interests, and goals. But sometimes their interests are seen as being at odds with others' interests and modes of expressing those interests. As the size of the community increases, these conflicts also increase. There are more people with similar interests with whom a member can align her or himself. There are also more people with perceived opposing interests that a member can align against, as with Dvora160 versus the animators. These conflicts of genre preferences and issues of age-appropriateness (as with Ashleigh\_Jaguar) can be handled through moderator mediation and respectful interactions between involved parties. The case of Zaw is somewhat unique, in that he fundamentally rejects the overarching goals of Scratch. One metamod described the difference between these two different conflicts:

The community is not homogeneous. There are shared values and shared goals, but it doesn't mean that everyone has exactly the same goals or exactly the same values or exactly the same interests. Ideally, I'd like to see the values as more consistent and more homogeneous. Whereas the interests would vary and there would be greater diversity, there should be more openness, with many different pathways for interests or styles of work. (Metamod #1)

But this assumes that one is even able to identify interests that are shared (or not) by others. All of the metamods described the difficulty that the size of the Scratch website presents to members, both new and old. One metamod described how he saw the inability to find one's interests reflected in the archive as contributing to negative feelings:

The challenge is that you can point to this place and say who we are, but it's really hard to look at it from outside. In Scratch, it's really hard because you have to either search or – there aren't the right affordances. I feel that's a problem with most large archives, online archives. There aren't the right tools yet to see everything and organize it and zoom in and zoom out. I think it makes people feel overwhelmed and makes them feel less powerful. (Metamod #2)

In either case, the value of *diversity* is impinged upon by either a desire to protect one's sense of – or lack of inclusion in – *identification* with others.

#### Aspiration: Encouraging a Sense of Group Belonging / Actual: Seeking Attention

Collaboration enables people to construct ideas and artifacts greater than they could achieve independently (Koschmann, 1996; Rogoff & Lave, 1984). There are numerous capacities that contribute to effective collaboration, including communication and perspective-taking capacities. Collaboration occurs in different configurations and with different aims. In Scratch, we see people collaborate in pairs, small groups, and large groups – with both top-down and more diffuse management styles. These configurations support all aspects of an iterative design process – from imagining projects, through creation, playing, sharing, and reflection (Resnick, 2007). In a fundamental way, the entire Scratch community is a large collaborative experience, with people exchanging ideas to contribute to a collective progression as computational creators, expressing themselves creatively through media artifacts. But this general sense of belonging to the larger social sphere is

sometimes undermined by the position and progression of the individual – the ways in which the we is undermined by the me.

Puppet is an 11-year-old boy who has grown savvy (and somewhat cynical) about tactics that Scratch members use to become famous on the Scratch site. He creates a project about how to become famous, which he describes as partly ironic and partly accurate. He recommends spamming members' projects, creating projects that declare a dramatic and abrupt departure, and establishing memes that will be broadly appealing to others and popular in the community. Other Scratchers don't notice – or choose to ignore – the ironic intention of the project and post comments about which of the approaches (and suggestions for other approaches) have worked for them.

The\_Destroyer is a 12-year-old boy who threatens to take down the Scratch community server and members' computers with a virus that he has written. He writes threatening messages to others in the community on the forums and encourages them to acknowledge his amazing powers. SNYgames is a Scratcher who rushes to the community's defense, and courageously announces that he will confront and defeat The\_Destroyer. The drama between SNYgames and The\_Destroyer escalates, causing much anxiety in other Scratch members. A moderator defuses the situation by publicly exposing SNYgames as The\_Destroyer, and kindly asks that SNYgames cease the dramatic impersonation.

HiddenComet is a 14-year-old girl who shares her experiences of having diabetes with the Scratch community. There is an outpouring of support and concern for her in the face of this life-threatening condition. Another member of the community, Chattydeign, shortly announces that she too has diabetes and is on the verge of death. It is revealed, however, that Chattydeign is deceiving community members to gain attention. Members create projects about the deception and harshly criticize Chattydeign for attempting to falsely gain sympathy and status.

Attention is important – Scratch community members want to be recognized for their contributions. A metamod described a lack of attention as obviously demotivating:

When you don't get any feedback for what you create, that undermines the sense of community because you feel like nobody is listening to you. There's no difference between you being by yourself, doing what you were doing before and doing it now in this space. (Metamod #2)

He went on to explain how the size of the community can contribute to further demotivation, if one is unable to *ever* imagine oneself as making a major contribution:

The fact that we have libraries with tons of amazing books makes me less likely to feel that I'm going to be a great writer. There are all these amazing people. I'm just going to write a paper – I'm never going to be the next Shakespeare or someone like that. I feel that, in the same way, it could detract from people feeling like they could make a big contribution. As the site grows, you feel smaller. (Metamod #2)

But a need for attention is fundamentally in conflict with a sense of community. Attention is not equally distributed across members, and there is only so much attention available. These conditions lead to members becoming problematically tactical with the community's attention, as demonstrated by the vignettes about Puppet, The\_Destroyer/SNYgames, and Chattydeign. The metamods group regularly discusses (and designs) ways of productively responding to the desire for attention, in ways that benefit both the individual and the community. From featuring projects with less visibility to promoting the value of collaboration, our responses are centered on cultivating awareness of others – a me-we, self-social progression:

They're at this stage, "It's me! What can I get?" and that's the appropriate moral development that they should be at. But at the same time, I want to provide some sort of scaffolded question that leads them to think – "What is the entire effect on the community?" – so they can acknowledge that what they're participating in is a real thing. It's often moving people, helping moving people from a totally self-focused view to a slightly larger view. Whatever slightly larger means to them. (Metamod #3)

#### But is it a Community?

These four gaps between the aspirational and the actual demonstrate a common problem: it is increasingly difficult to connect with others – and multiple factors amplify this difficulty. The size of the site is a problem, not simply because there are many people participating, but because there is a lack of satisfying ways for representing or accessing that large number of people. The public, anonymous, and reduced expression of interactions on the site is another problem that continually impacts people's ability to form intimate relationships with one another. The natural tension between the self and the social challenges connections

between people, from desires for fame to fears of loneliness. Finally, there is the difficulty of *exclusively* valuing problem-free connections or relationships with others. While some may be alienated by conflict, it can simultaneously unite others. Drama, nemeses, and hardship can all serve to connect people, even if at the expense of others.

Despite these gaps between the aspirational and the actual, is the Scratch website a community? This is not a preoccupation with the word *community*, but rather with whether or not we (as metamods, as the Scratch Team) are satisfied with the ways in which the website represents our aspirations. Is it a community in the way we desire it to be a community? I asked each of the metamods whether they felt the Scratch site is a community. One described how, although he saw many ways in which interactions between members could be improved, he saw relationships being formed as an indicator of community:

Yes, I'd say that Scratch is a community. And the evidence of this has to do with the cultivation of long-term relationships, which does occur a lot on the Scratch website and the expression of – what's the word? for brotherly love? agape – that "you and I we're sort of similar." There's that kind of acknowledgement. (Metamod #3)

Although generally not concerned with the use of the word *community*, another metamod adopted a similar litmus-test approach to the Scratch-website-as-community question. His focus was on activity and values:

I tend to think of it as a community. I don't focus so much on what the definition of community should be. But I see the Scratch community as both sharing some activities – of creating these particular types of artifacts with this particular tool. But I'd also like to see it as a community that shares certain values – the values of personal expression, collaboration. (Metamod #1)

Consistent with his initial definition of community, one metamod talked about the subjective nature of the Scratch community, that it "is more of a personal decision." When I asked directly whether it is a community *for him*, he described how our differentiated status as designers complicates the relationship:

For me? No. I guess it's hard. Because the position we have – it's like the mayor of a city, who I guess is part of the community, but you have a different position. I don't feel like I'm part of the kids. It seems like there is some distinction there, by the way the kids relate to the Scratch Team members. They know they are different from us. For me, I do recognize it as a community, and I feel part of it insofar as my role as Scratch Team member. My experiences are probably different from those who are "real users" of the community. (Metamod #2)

Our role is obviously complicated. We are designers – participants with intention and power. But what does this difference imply about the relationship between the designers and the non-designers? All three metamods adopted different perspectives on the significance or importance of the designers in defining and driving community processes. One viewed active participation and community cultivation by the Scratch Team as important, but acknowledged that competing interests between designers and other members may result in tension:

There can sometimes be a tension between being a designer – of having certain types of goals and values that you see as important for the community – but then also wanting to support the desires and goals of the community members. Sometimes there can be a conflict between what some people in the community see as the values and goals of the community. That can be a challenge. (Metamod #1)

Another described definition and participation as a joint responsibility of designers and other members. Members should feel a responsibility for making the community, but that the making is overseen by the designers:

It's more that this community is yours, and if you want to do something different, I encourage you to do that. As long as it's positive and helpful. (Metamod #3)

Finally, one described authentic participation as emerging from ownership, and wished that the members could be given more autonomy over *their* community:

I feel that one thing we could do to make it more of a community is to have the ability for people to decide what are the things where they can participate for the benefit of community

and let them select those things and let them do those things. So you see the Scratch Team as external to the community processes? Yes. (Metamod #2)

## Mind the Gap: Reflections and Suggestions

This work began with a question about using the word *community* to describe the Scratch website. The process of coding ethnographic observations of the community and interviews with the community's stewards has helped me think about this question – and has provoked new questions. Although I knew at the beginning that *community* is a complex and multifaceted word, having the opportunity to unpack some of that complexity in conversation with other metamods was quite valuable. While we share general conceptions of what the word *community* means, it is obvious that we value different aspects of what *community* represents.

The newly-provoked questions do not stem from a definitional preoccupation. They emerge from an acknowledgement that design of technological infrastructure is insufficient to support the aspirational – the goals of the Scratch project and of constructionism more generally. It is not enough to stand by and simply observe what happens with (or to) the site, to assume that our existing design is sufficient in and of itself, and that members will not take up and reimagine the space in conflicting ways. de Certeau (1984) cautioned against making this assumption:

It is nonetheless implicit in the "producers" claim to "inform" the population, that is, to "give form" to social practices. ... To assume that is to misunderstand the act of "consumption." This misunderstanding assumes that "assimilating" necessarily means "becoming similar to" what one absorbs, and not "making something similar" to what one is, making it one's own, appropriating or reappropriating it. (p. 166)

We need to be actively contributing to, participating in, and negotiating the interactions and activities on the site to support our goals. We must constantly struggle to recognize and to mind the gap between the aspirational and the actual in the online community. Yes – community is subjectively defined. Yes – community is subjectively experienced. But that does not mean that we should refrain from influencing its development. As designers, we should continually ask if it is moving toward the actual to which we aspire.

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