

COPY AND PASTE LITERACY? LITERACY PRACTICES IN THE PRODUCTION OF A MYSPACE PROFILE

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Abstract

In this chapter, I argue that MySpace is an environment that fosters the development of new literacies. Drawing on examples from fieldwork and my own use of the site, this analysis is based on a model that tries to reconcile social and technical perspectives on literacy. The expressive power found in the creation of a MySpace profile concerns a technically simple but socially complex practice: the copying and pasting of code as a way to appropriate and reuse other people's media products. However, the importance of copying and pasting code does not easily fit in the common conventions of reading and writing, consumption and production. By integrating theories of appropriation and reuse of media with theories of literacy, a new way of thinking about this practice emerges, seeing "participation" and "remix" as important concepts to describe the social and technical aspects of these new literacy practices.

Introductionⁱ

Over the past several years, educators, the media, policy makers, law enforcement officials, advertisers, venture capitalists, academics, kids, teenagers, and parents—a large segment of American society as a whole—have all turned their attention to a website called MySpace.ⁱⁱ With respect to teenagers, much of the public debate has been concerned with issues of privacy and safety. However, in this chapter my interest is in teenagers' production and use of their MySpace profiles as a part of their everyday communication.

MySpace is a site where millions of membersⁱⁱⁱ create personal profiles and take part in a variety of social activities. For the teenagers who actively use MySpace, it is one of their primary means of communicating with each other and is an environment in which they can participate in many facets of American culture, especially in entertainment sectors such as music, television, and movies (boyd 2006a). Many put significant time and effort into creating and maintaining their MySpace profiles. In what ways can the production of a MySpace profile represent a locus of new digital literacies?

The answer depends on what is meant by "literacy." Here, I first analyze the creation of a MySpace profile with respect to a framework of literacy that integrates prior social and technical perspectives, focusing on the use of code. Then, I argue that while MySpace is not an ideal environment for learning some of the languages of web production, the expressive power found in the creation of a MySpace profile concerns a technically simple but socially complex practice: the copying and pasting of code as a way to appropriate and reuse other people's media products. Finally, I contend that this practice calls into question the dichotomies used when describing the processes of "consumption" and "production" and the activities of "reading" and "writing." By integrating recent work in media and cultural studies with research on literacy, concepts such as "participation" and "remix" provide a useful way of describing this new literacy practice.

Studying MySpace in use

My understanding of MySpace use has been informed by prior research (Marwick 2005, boyd 2006a, boyd 2006b), my own use of the site, and participant observation with teenagers. One of the methodological problems of studying the internet, especially when trying to use methods often associated with ethnography, is locating the "site" of research (Lyman and Wakeford 1999, Hine 2000). I have

explored MySpace and the profile production process in order to gain a better understanding of how the site works; this has included following links to external resources, such as tutorial sites, blogs, and third-party resources. However, MySpace, as of this writing, is not a significant part of my routine communication, and I am also not a teenager. Therefore, inspired by research on literacy that emphasizes studying how tools and technologies are taken up and used in everyday life (e.g. Scribner and Cole 1981, Street 1995), I have been conducting participant observation at a community-based arts and technology center (hereafter “the Center”) in order to understand more about how teenagers use MySpace in a “natural” environment, meaning a place where it would be used whether or not I was present.^{iv}

The Center runs classes for youth on a wide variety of media production skills. The Center has a high bandwidth Internet connection and ten Macintosh computers that the students use for class projects. However, before class, during breaks, after class, and even sometime during the small gaps between activities, many of the students (ages 13-17) use the computers to log in to their MySpace accounts. While I have no way of knowing if the students use MySpace differently at the Center than they do in other places, they do not exhibit many inhibitions while using it. In summary, the students have appropriated the Center as a place where they use MySpace as a part of everyday communication with their friends and family.

The MySpace profile – a social production

A MySpace profile is an often colorful and media-intensive web page, where members describe themselves, list their interests, and link to friends. Many teenagers’ MySpace pages consist of a mish-mash of text, pictures, animated graphics, bright colors, and sound, leading a popular American business magazine to label them as “design anarchy.”^v They look much different than the default page with which every member starts.

There are a number of factors that account for why different members’ MySpace pages can look (and sound) radically different from one another.^{vi} First, members can override the parameters that control the basic “look and feel” of a page, including background colors, font sizes, font colors, borders, and background images (see Figure 1). MySpace members typically use one of many third-party sites and either choose from a wide variety of “layouts” or use a “code generator” that presents choices of colors, fonts, font-sizes, and so forth for each aspect of the page.^{vii}



Figure 1: Two versions of the author’s MySpace profile. The one on the left uses the default layout and colors. The one on the right uses different styles and graphics to change visual elements.

After finding a layout or using a code generator, the person has to copy a block of HTML and CSS (Cascading Style Sheets) code from the site and paste it into one of the free-text form fields provided by MySpace for entering profile information (see Figure 2).^{viii}

Customizing through a themed layout often involves using media and graphics that come with the templates, also hosted by other third party websites, as a byproduct of using that layout. However, members can also explicitly “embed” media in their pages by pasting code that links to images, video, audio, and even games (see Figure 3). This reuse and appropriation of media, account for much of the color, sound, and animation found on a page and also dictates the way other elements appear by taking up horizontal and vertical space. In linking to media in this way, either implicitly through the layouts or through explicit

embedding, members give up much control of what appears on their profile and how it might change over time as the media often exists on someone or some company's servers.^{ix}

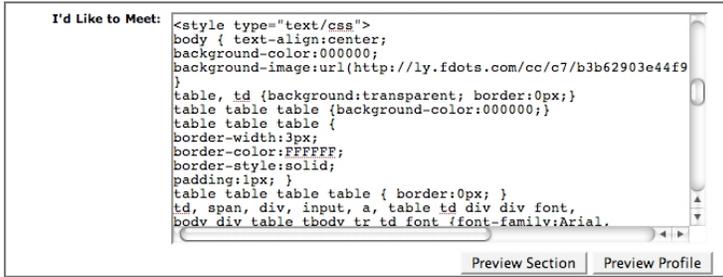


Figure 2: Changing the page theme requires putting code into a profile form.



Figure 3: Embedded images and other media in a profile.

Finally, people can often include media in their comments on other people's pages that come with the same aesthetic effects (see Figure 4). Therefore, even if a member carefully selects or manipulates media in an effort to wield more aesthetic and editorial control, friends' comments can work against those efforts.

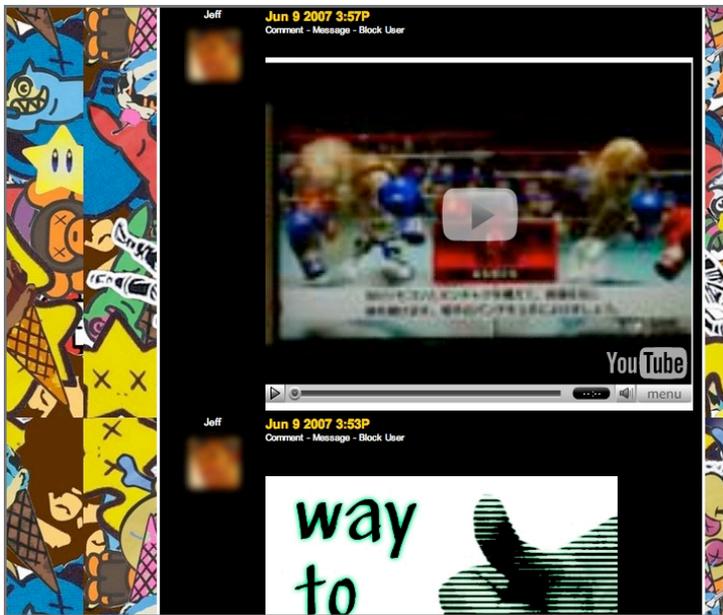


Figure 4: Comments can include embedded media as well as textual messages.

The embedding of code with links to media, whether by a profile's "owner" or her friends, means that each profile is the product of many people, not just the work of the individual MySpace member. Continued control of how a profile is put together is distributed amongst many people and resources. Therefore, in looking at how profiles come to look the way they do, it is difficult to isolate the technical practices from social ones. A view of literacy that fails to account for the social dimensions of what is also a technical practice will not suffice. Yet ignoring the technical dimensions would not reveal the potential importance of new media, such as code, in these social practices. In the next section, I present a socio-technical perspective of literacy and analyze the production of a MySpace profile in relation to it.

The MySpace profile as a site of new literacies

Different theories of literacy present different notions of what it means to be "literate" in society. Some have focused on what a technology (or medium) enables and what social and cognitive consequences come as a result of it (e.g. Goody and Watt 1968, Goody 1977, Olson 1977, Ong 1982). Arguing against many of the premises and conclusions of this work, Scribner and Cole introduced the notion of a "literacy practice," the situated use of a "combination of technology, knowledge, and skills" and the application of this knowledge "for specific purposes in specific contexts of use" (1981, 235). Similarly, the "ideological model" of literacy (Street 1984) and the "New Literacy Studies" movement, which sees literacies as social practices (Street 1995, Gee 1996) shifts the focus from the medium of expression to the social practices in which the media use is embedded and in the ideologies implicit in those practices. Recently, research on digital or media literacies (Hobbs 2004, Livingstone 2004) show that there is a range of perspectives as to which aspects of the use of media are essential to notions of literacy, ranging from a critical consumption to being able to use the tools of production.

One perspective that seeks to integrate these different understandings of literacy is that of Andrea diSessa (2000, in press) who defines literacy as:

"The convergence of a large number of genres and social niches on a common representational form" (24).

His definition pulls together three theoretical influences from those outlined above. First, uses of particular media must be considered within their social context. Second, these uses take on specific patterns, or genres. Finally, the medium-dependent properties of those representational forms matter. This definition of literacy overlaps in important ways with Scribner and Cole's (1981) notion of "literacy practice," namely that understanding literacy means understanding how people use technologies, skills, and knowledge in specific social contexts. However, diSessa's goal is to see how the uses of a particular form bridge different social contexts.

In this chapter, I use this perspective to analyze the production of a MySpace profile because of the balance it strikes between social and technical views of literacy, and also because it provides a lens through which to view prior debate. In this section and the next, I argue that diSessa's theoretical framing of is a useful way of understanding the possibility of new literacies in the production of a MySpace profile.

MySpace profiles and social niches

According to diSessa a social niche represents the "complex web of dependencies" in communities that allow (or do not allow) various competencies to thrive (2000, 24). diSessa's emphasis on social niches demands a look at the range of uses of MySpace and how they are supported by values, beliefs and practices (see also Gee 1996).

The features and uses of MySpace demonstrate a convergence of many web predecessors and the uses that accompany them. MySpace can be seen as a more interactive alternative to personal homepages for many of its teenage users (see Chandler and Robert-Young 1995). It is a "social networking" service that lets people expose and navigate their networks of "friends" (or contacts) and meet people through others (Marwick 2005, boyd 2006a). It also has features to support blogging, bulletin boards, synchronous instant messaging (IM), asynchronous messaging (like e-mail), online-dating, and photo sharing. Some of these

features, as I saw at the Center, are used in concert to support teenage relationship-building between new friends within the Center and between .

MySpace is also a site where entertainment production and consumption converge. The MySpace music and video services allow professional and amateur artists to disseminate their music by making it publicly available for use on other people's profiles. Some of the teenagers at the Center are a part of this emerging practice using MySpace to promote videos created at the Center or on their own. On the consumption side, MySpace is also a site to find and share music and videos, something that seems to be a central feature for the teenagers at the Center. Grace, 14, for example, spends significant time finding music to embed in her profiles, as her "profile song." However, as a more complex example of consumption, she also uses MySpace as a source of ring-tones for her mobile phone. In one incident, I watched her navigate to several popular artist's MySpace profiles, choose a particular song, embed that song in her own profile, and then play the song while holding her mobile phone up to the computer's speakers to record.

The social niches in these examples could be said to include the variety of people and institutions that support and value how these teenagers use MySpace, such as the teachers and other students at the Center, the families and friends of the teenagers, and also the industries and institutions that also use MySpace for their own commercial interests. Understanding the diverse uses of profiles calls for further research of how these social niches and contexts overlap, which is beyond the scope of this chapter.

Genres in the production of MySpace profiles

The second component of diSessa's model is the concept of "genres" in the use of a medium. diSessa defines "genre" as "the specialized form in which we find literacy exercised in production and consumption" (2000, 22). He adapts this term from Bakhtin (1986), who discusses genres as patterns of language that gains stability through specific uses in a "sphere of activity." (1986, 60). According to Bakhtin, generic forms shape how we choose our words and construct thoughts in communication. And, the generic forms we hear in others' speech shapes how we interpret and construct meaning. Finally, Bakhtin argues that, "genres must be fully mastered in order to be manipulated freely," implying a mastery of using generic forms, or generic competencies (1986, 80).

Genre is the conceptual glue that binds social activity to technical activity. In order to understand literacies, one must pay attention to the particularities of social activity and also to the generic forms and competencies that groups share in their use of a media. The creation of a MySpace profile involves an understanding of many generic forms and the use of generic competencies that cross spheres of activity.

Profiles and generic forms

With regard to generic forms of language, MySpace relies on a particular notion of "friend" that is common among social networking sites, but signals a particular definition of the word that is not necessarily the same as its use in everyday interaction (boyd 2006b). For example, in a discussion with three girls about MySpace, one of my colleagues listened to them contrast "associates" and "friends" in everyday language with how "friends" is used on MySpace. When I asked Gregory, 15, about becoming his friend on the site, he said "the more the better!" indicating that one of the aspects of MySpace use involves competition in collecting "friends." Amassing friends is not necessarily something just for online environments: it can be an indicator of status and popularity offline as well. Therefore, the use of the word *can* be similar to how it might be used in other contexts. Therefore, untangling the various meanings in order to use the word correctly requires a mastery of the genre.^x

There are also generic forms of interaction within a MySpace profile. For example, the "Comments" on a page are forms in that they are a particular method of asynchronous, public interaction with a page's "owner," that is a standard aspect of blogging and other social networking sites. But, on MySpace, like similar features on other sites, comments are not in response to a particular piece of writing. Rather, they provide a way to "check in" with someone, coordinate plans, conduct a public "conversation," just to name a few observed practices. Similar to the competition to collect more friends, some of the teenagers repeatedly asked members of our research group to make a few comments on their pages so that they would have more comments than others, noting that numbers of comments also indicates status to some.

Generic competencies for profile customization

Beyond recognizing and using generic forms of language and interaction, there are also generic competencies required for mastering the creation and maintenance of the profile. Even though I am experienced with web programming languages, it took a great deal of effort for me to figure out how to use my knowledge on MySpace, despite claims by the MySpace FAQ that it is “easy” to customize a profile and “requires only a basic knowledge of HTML.”^{x1}

The MySpace FAQ encourages members to go and “meet new people” in order to get help. This underscores how strange it might be that I had been trying to figure out how to customize my page on my own. At the Center, we have observed several situations in which teenagers faced a similar dilemma. New users of the site asked each other for help, and others in the class had no noticeable reservations about stopping what they were doing and trying to help them. When I have asked people how they learned how to customize their profile, the answer is usually “a friend,” “a cousin,” or some other family member showed them or even did it for them. Therefore, in reality, the “basic knowledge” is not just knowledge of HTML code, but also the skills necessary to use friends and one’s networks on MySpace.

In my own search, I discovered “member” profiles that were collections of tutorials written by a number of different people. I also searched outside of MySpace and found a multitude of resources such as the layout sites and code generators described above. I found active discussion forums in which people discussed how to customize their pages, with experts providing tips and code snippets for making more complex changes. When I found code, I copied it, inspected it, and even modified it. My steps here match those I have taken to learn other programming languages (not just HTML and CSS) for other social purposes (not just customizing a MySpace page), and even those I have seen in other communities of software development.^{xii}

The role of the medium – from “coding” to “copy and paste”

Accounting for the “convergence” of social niches, generic forms, and generic competencies, have proven to be useful tools for analyzing the creation and use of MySpace profiles. However, diSessa claims that literacies are marked by this convergence on a particular medium. Different media have different expressive properties and facilitate new ways of thinking. How we think when we write can differ with how we think when we talk, draw, paint, or write software. Therefore, a particular use of a medium can lead to the development of a new “material intelligence,” a way of thinking that “is achieved cooperatively with external materials” (2000, 5). Thus, while rejecting “technological determinism,” diSessa is critical of “socially oriented literacy studies that have backgrounded or dismissed the contributions of the ‘props’ of literacy, its technology” (in press, 21).

This aligns his work along with those that look at “multimodal literacies,” which in part are dependent on the “affordances” of a mode and the “facilities” of a media (Kress and Jewitt 2003 Kress 2003; see also Hull and Nelson 2005). Similarly, Buckingham (2000), in his call for a change in how researchers view child audiences of media, indicates that there is a need for research that looks at “constraints and possibilities embodied in media texts” (120). Livingstone (2004) agrees, noting that an emphasis on skills has left the question of technology and representation largely unaddressed.

In this section I evaluate the importance of two of the technical and medium-dependent practices involved in the creation of MySpace profiles. First I discuss the possibility of MySpace as promoting a digital literacy based on learning to code. Second, I explore the significance of the copying and pasting of code that links to media, a practice that it is an important, medium-dependent form of expression that I argue should not be subordinated to coding.

Learning to code HTML and CSS using MySpace

In speculative response to diSessa’s notion of “material intelligence,” my first focus is on the coding skills MySpace profile customization involves. From a technical perspective, one can think about any web page as having structure, content, and presentation (or style). HTML can be used to control all three, but over the past several years, Cascading Style Sheets (CSS) has become the standard way of separating content and structure from style.

An example helps clarify. Imagine I have a paragraph of text about myself. In my HTML code, rather than say that this text should be red, bold, and in 16pt font, I can indicate that that this paragraph of text should be "about me text." Then, I can create a style using CSS to indicate what "about me text" should look like. This separation in the code between what the text says from what the text looks like provides me with the ability to change a style in one place and apply the same style to multiple chunks of text throughout the document.

Therefore, HTML and CSS, like other programming scripts and languages, encourage a particular way of thinking about problems. Learning to use them requires learning how to think modularly, how to decompose problems in certain ways, in this case related to this notion of the separation of style, structure, and content. Learning the complex array of skills necessary to create dynamic, interactive Web pages *potentially* could meet diSessa's threshold of an "increase in expressiveness" or a new material intelligence, though this would require more research to prove. But even if this is true, how good of a learning environment is MySpace for mastering the representational form and technical competency of web programming?

Certainly, it provides an introduction to the medium, and some even may learn more about HTML and CSS as a part of trying to customize their profiles. However, the way in which the MySpace designers use CSS works completely against the intended purpose of style sheets. For example, the MySpace designers have defined "styles" for every font-color-size combination used. This results in members being forced to do some rather strange things to change properties like font colors (for example, making a style named "yellow" actually be red, and so forth). This might be fine for creating web pages, but eliminates many of the potential advantages and new ways of thinking that may come from separating form from content. Moreover, MySpace has constrained people into a way of using HTML and CSS that is not very flexible and does not inform ways of using the technologies that give them their potential power as expressive media outside of the context of MySpace.

The use of copy and paste on MySpace

Nevertheless, MySpace is an environment in which another practice has established a strong foothold, one that is also dependent on the nature of HTML and web technologies: copying and pasting blocks of code as an act of selection, manipulation, and appropriation of work done by others. Technically speaking, copying and pasting does not require much skill. It seems unremarkable, almost unworthy of consideration as a significant technical practice. However, the small act of copying and pasting blocks of code from many different sources is at the core of many teenagers' individual expression on MySpace. Furthermore, new companies have emerged (such as YouTube) that encourage people to copy and paste links to nearly every type of media object from one place to another on the Web, including a MySpace profile.

This activity resembles others: collage-making, quilting, pasting posters and magazine articles up on bedroom walls, and so forth. There are also connections to existing practices with digital media (e.g. Chandler and Roberts-Young 1998, Sefton-Green 2005). However, networked computational media changes the act copying and pasting in a number of distinct ways. First, a MySpace member can copy and paste links to almost any type of medium: images, personal photographs, music, home-movies, TV shows, cartoons, games, and even interactive applications. Second, members can continuously update what their profiles looks like by swapping in and out different media or adding to what already exists. Third, copying and pasting on the web requires minimal effort; a staggering array of source material is available via the Web through the same browser interface.

Finally, people are not copying and pasting media. They are copying and pasting abstractions (code) that link to the sources of that media. This creates complex webs of dependency between people's creations. In other words, as Bakhtin argued about speech, members' pages are "filled with other's words, varying degree of otherness or vary degrees of 'our-own-ness'" which members "assimilate, rework, and re-accentuate" (1986, 89). However, these pages are *materially* connected as well, through links. Through members' choices and those by their friends in comments, each person's form of expression is explicitly connected to others' expressions, which in turn are connected to others' and so on.^{xiii}

The following example demonstrates copy and paste in practice, illustrating these aspects of the process. It is particular instructive because it highlights the network of resources, both social and technical, utilized for individual expression and also shows the sense that any one person's profile is created through distributed production. Taken from field notes, the following narrative describes a situation that came about

while Janice (15) and I were trying to make sure that the two of us were connected as “friends” on MySpace:

After making sure that I was on her list of friends, I went to a second computer positioned to Janice’s right to log in to my profile. Then, I heard her laugh out loud. I looked over and noticed that she was browsing a friend’s page and was laughing at a particular image that someone had left her friend as a comment. Janice clicked on the image and it took her to another page, one of the many sites on the web that hosts images for the direct purpose of being used on MySpace or other sites. She scrolled down through the page of images that were on the site, which seemed to me to be like greeting cards. She saw one that was a take-off of one of the characters of the TV show “Family Guy.” She clicked on that image, which took her to a page that had the image followed by a text box with the HTML code for the image...Janice copied the code.

She scrolled through the pages of her friends and clicked on a friend. For a few seconds she scrolled up and down on that friend’s profile, but then apparently changed her mind and returned to her browsing through her list of friends. Next, Janice said something out loud, but seemingly to herself, about “knowing” to whom she should “give” the picture (indicating a sudden realization). Janice clicked on one of her friends and went to her profile. She scrolled down to the comments and clicked on the “Add Comment” link. In the text box that appeared on the next page, she pasted in the block of code that she had previously copied. Janice then checked to see that the comment appeared, and noting that it did, returned to her “home” page.

In relation to my discussion of literacy, a number of points stand out as particularly interesting. First, it was an unplanned sequence of events. Janice’s decision to comment on a friend’s page arose spontaneously out of her interaction with someone else’s comment on someone else’s profile. The desire to comment stemmed from Janice’s appreciation and enjoyment of a particular image, a representation from popular culture that had already been re-worked, and then searching for something to do with that image that was symbolically meaningful for her.

Second, the whole process was routine for her and took at most a few minutes. Each interaction with the browser, from knowing that she could click on the image to get to another site of images to copying the code from one site and then pasting into another was fairly insignificant. This was obviously something that she had done before and most likely fairly often.

Finally, it’s important to note that the design of the code and media made the sequence possible and played critical roles. For example, the original image was also a link to another site. This site hosted many images and presented them specifically to be used on MySpace pages. Code and instructions for copying and pasting (though Janice didn’t need the instructions) came with each image. Furthermore, all of this activity was possible within one application, the web browser.

This example also raises many questions and it is difficult to have a complete understanding of this situation without much more knowledge regarding the greater social context of Janice’s use of the site. But the example should make it clear that copying pasting code for specific purposes is not trivial or meaningless simply because it appears to be simple in relation to programming.

Participation and remix: “New” terms for new literacies

Research on literacy practices in relation to the web has focused on the need to develop critical skills in analyzing and evaluating web content (e.g. Livingstone 2002) or on the use of HTML to “write” web pages (e.g. Chandler and Robert-Young 1998, Facer et al 2003). In reaction to and anticipation of much of this debate regarding web literacies, diSessa is ambivalent:

The World Wide Web is equally encouraging and discouraging regarding the practicality of new literacies. It is a big step in economics and distribution, but a small step in form. It is two-way and reaffirms the importance of two-way media in the enthusiasm in self-expression it has engendered, but it is only one-way with respect to new expressive possibilities offered by computational media: ordinary folks are limited to text and pictures; they can’t create dynamic and interactive documents. (2000, 221-222)

But are there other ways to become literate in the interactive space of the web? Despite diSessa’s dismissal of the web’s potential for new forms of expression, I argue that that there are problems with framing potential literacy practices as “one-way” or “two-way” as important new social and technical practices, such as the copying and pasting of media, are easy to overlook.

Focusing on learning to use HTML and CSS coding in MySpace paints a picture that is consistent with diSessa's point of the Web as only "one-way with respect to new expressive possibilities." However, a focus on the act of creating networks of links to media clouds the picture. By stitching together media from a variety of sources, "ordinary folks" on MySpace can *easily* "create dynamic and interactive documents," to which diSessa refers. Millions of people, including teenagers are already doing it.

Part of the problem in seeing the potential importance of the "simple" act of copying and pasting maybe because of the fundamental terminology of the discussion. It calls into question the notion of "two-way" literacy and a focus on the consumption and production of media. The creation of a MySpace profile is neither strictly "reading" or "writing," yet is somehow both simultaneously.

Facer et al. (2003) point to examples of how kids "creatively copy" material and templates in order to learn, resembling some of the practices I have just outlined. The practices are neither "'simply reproduction' nor 'simply creative'" (2003, 114). Nevertheless, they opt to recast the word "consumption" to describe kids' accumulation of "cultural resources" that enable them to produce and communicate their identities (2003, 112). This type of redefinition of terms has led researchers in media and cultural theory to question the dichotomy between the "consumption" and "production" of media, with implications of how to consider copy and pasting as part of MySpace profile production.

In Jenkins' (1992) account of television fans he reveals that people traditionally viewed as "consumers" are also producers in two ways. First, people create meaning in products, such as toys or narratives, through their use. As French cultural theorist de Certeau previously argued, this meaning-making through reinvention is an act of production as well as consumption: the reader "invents in texts something different from what they 'intended'" (1984, 169). Second, deviating from de Certeau, Jenkins reveals how various fan groups produce tangible artifacts, such as fan fiction and "transform the experience of media consumption into the production of new texts, indeed of a new culture and new community" (1992, 46).

Ito (in press) builds on these arguments and other debate concerning active and passive media audiences^{xiv} and argues that "new convergent media...require a reconfigured conceptual apparatus that takes productive and creative activity at the 'consumer' level as a given rather than as an addendum or an exception" (in press, 4). Building on the work of Jenkins (1992) and Lave and Wenger (1991), Ito uses the concept of "participation" as an alternative to consumption. A notion of "participation" assumes that engagement with media is "social and active," provides a way to consider issues of power and ideology, and takes into account both the relationships between individuals and media and between groups engaged with media. According to Ito, "the research question has been recast from the more individualized, 'How does a child interpret or localize a text?' to the collective question of 'How do people organize around and with media texts?'" (in press, 5).

If "participation" is a word that challenges the consumption/production dichotomy, then "remix" may be its counterpart to bridge the reading/writing dichotomy. The word "remix," originally used to describe a particular way of mixing music samples, has itself been appropriated to generally describe the mixing of a variety of media forms to create new products.^{xv} A recent study by the Pew Internet and American Life Project (Lenhart and Madden 2005) uses the word "remix" of teen content creation to imply the creation of new "artistic" content from prior media forms.^{xvi} Jenkins et al. (2006) view artistic appropriation of content through remix as an essential aspect of new media literacies.^{xvii}

But there is no reason to constrain "remixing" practices to the development of "artistic" creations as that study defines the term. These practices are similar to those described by Willis (1990) as "common culture," "symbolic creativity in everyday life, everyday activity and expression" not an elite notion of "art" (1). In exploring literacy, Dyson (2002) analyzes first graders' use of popular media in their classroom writing assignments as "remixing," explicitly connecting their work to musical sampling. She notes the "textual play" involved in the "appropriating, differentiating, translating, and reframing cultural material across communicative frames and social world" (2002, 555). Here, my use of remixing presumes these types of symbolic and material appropriations and translations, what Erstad et al. (2007) describe as "re-mixing semiotic resources" in their study of high schoolers' media productions.^{xviii} However, my emphasis is on the re-use of distributed media through the remixing of *code*, thus adding yet another material dimension to the process.

If "remixing" is used to describe the practices required to blend text, images, video, audio, and games in the creation and maintenance of a MySpace profile, the perception of "simple" technical feats of copying and pasting links to media, turn into socially complex chains of appropriations of media between people. Furthermore, the concept distinguishes itself from typical notions of "reading" and "writing." It parallels Ito's view that participation, "leads to a conceptualization of the imagination as collectively rather than

individually experienced and produced” (in press, 5) in that remixing media by copying and pasting is a collective technical practice; people’s creations are dependent on each other in many different ways. One could see remixing as a sign of a new, *networked material intelligence*, to adapt diSessa’s concept, though it would take further research to demonstrate this. Nevertheless, through MySpace and sites like it, knowing, socially and technically, how to re-use media in this particular way has become foundational for communication and creative expression over the web.

Conclusion

In this chapter, I have laid out an argument that in light of theories of literacy concerning both “old” and “new” media, there is good reason to suspect that the work involved in the production of MySpace profiles involves new forms of literacy practices, and that those practices, to some extent, are dependent on a particular representational form, code, and the systems to manipulate it in a particular way. With diSessa’s emphasis on the importance of the representational form as well as the social context of use, he calls into question accounts of new media literacy that treats computational media as a “text.” Similarly, Livingstone (2004) argues that if using the Web represents something new, rather than an extension of textual practice, more research is necessary that will “investigate the emerging skills and practices of new media users as they meaningfully appropriate ICT into their lives” (10). Understanding teenagers’ use of MySpace calls for a deeper look at the social practices and niches that shape how people create and maintain their profiles and also a look at the roles that code, the multiple forms of media found on the web, and the site itself play in enabling certain practices and constraining others.

A social perspective of literacy helps show that a part of problem in this framing of copying and pasting as a literacy practice is that it does not neatly fit within common educational practices. From the perspective of the social niche of traditional schooling, to copy and paste is to plagiarize, unless there is careful attribution of sources.^{xix} Therefore copying and pasting is antithetical to a literate practice. But, on the other hand, from the perspective of other social niches such as software development, copying and pasting is routine. Understanding when, why, and *how*—socially and technically—to re-use code are among core competencies. The question for future research is in what social niches might copying and pasting in the process of re-using a diverse array of media be considered the sign of a deep shift in how people engage with one another?

The teenagers who have created and are maintaining MySpace pages, are developing new technical and social skills that enable their participation in a variety of social activities using a new medium. They are learning to incorporate the Web in multiple overlapping facets of their lives. And, they are engaging in a networked discourse, one that many teenagers understand how to use, but not necessarily understand how to critically reflect upon (at least, not yet).

Reframing literacy in terms of both social and technical, or medium-dependent, practices helps us understand how these practices are embedded in existing social groups and niches, what they mean to the people who engage in them, and what properties of the media are that facilitate new expressive forms. Finally, considering “participation” and “remix” as the social and technical frames for understanding new media practices will help us recognize what new media literacies might be developed through them. Whether or not there are long term “consequences” of these practices is impossible to know now, but it’s important to recognize them now as important and to consider what might be gained by having them accepted by society as an aspect of new “literacy,” or lost by a failure to do so.

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Notes

ⁱ This chapter is based on a paper presented at the DREAM conference on Informal Learning and Digital Media: Constructions, Context, Consequences. September 21-23, 2006.

ⁱⁱ <http://www.myspace.com>. MySpace launched in 2003 and Rupert Murdoch's News Corp bought the site in 2005 for \$580 million. Since its founding, MySpace has become one of the most visited web-sites each month. For an overview of the site and how some teenagers are using it see boyd 2006a.

ⁱⁱⁱ It is quite difficult to accurately estimate the number of people who use MySpace. There is often a large discrepancy between the number of profiles, registered users, and active users. People may have multiple accounts and businesses and institutions have accounts on the site as well. In late 2006, the *San Francisco Chronicle* estimated the number as above 70 million (see Fost, Dan. "Key Web 2.0 sites" in the *San Francisco Chronicle*, November 5, 2006). Earlier in the year, a July 2006 estimate noted "membership approaching 100 million in total" (Olson, Stefanie. "MySpace blurs line between friends and flacks" on CNET's News.com,

http://news.com.com/MySpace+blurs+line+between+friends+and+flacks/2009-1025_3-6100176.html)

^{iv} Some this research involved collaboration with two colleagues and my work here is informed by their observations as well. Therefore, sometimes in this chapter I will refer to "we."

^v Garnett, Jesse James. 2006. "MySpace: Design Anarchy That Works." *BusinessWeek Online*, January 3, 2006, retrieved from: http://www.businessweek.com/innovate/content/dec2005/id20051230_570094.htm on January 4, 2006.

^{vi} In this chapter, I do not consider the use of text on MySpace. MySpace, though, provides few limits on the amount of text one can enter, and the visual importance of large or small blocks of text as visual elements should not be disregarded. As Kress (2003) argues, "On the screen the textual entity is treated as a visual entity..." (65).

^{vii} Two layout sites that I have encountered frequently from casual browsing of profiles: "Free Web Layouts" (<http://www.freeweblayouts.net/>) and "Pimp-My-Profile" (<http://www.pimp-my-profile.com/>). A generator that I have encountered frequently is "Thomas MySpace Editor" (<http://www.strikefile.com/myspace/>).

^{viii} MySpace, as of this writing, does not provide explicit "features" for profile customization. As it turns out, it is a case of engineering "mistake" turned into a feature that occurred when engineers failed to strip out the HTML tags from the form-fields. Later, members and third party sites, exploited this feature to create the idea of "customization" (see Carr, David. "User Customization: Too much of a Good thing?" *Baseline* feature on "Inside MySpace.com," January 16, 2007. Retrieved on January 27, 2007 from http://www.baselinemag.com/print_article2/0,1217,a=198615,00.asp).

^{ix} Servers that host the media can go down. Media hosting services may limit bandwidth on a user account. Some of the teenagers I have talked to have profiles that contain "image not found" graphics where something else had previously appeared.

^x See boyd 2006b for extensive discussion of friendship on MySpace and similar sites.

^{xi} <http://collect.myspace.com/misc/faq.cfm?question=1>, retrieved March 24, 2006.

^{xii} As a demonstration the generic nature of my process, my activities are quite similar to the ones that diSessa (2000) depicts in his examples of sixth graders learning physics with another programming medium. The student-run "library" of projects allowed students to check out and learn from other students' projects. Students obtained help from an expert and then re-used and re-purposed code in order to develop a complex game. Finally students developed tutorials for each other.

^{xiii} Livingstone (2002, 226-229) discusses the importance of the "routes model" of the web, where the link is the focus of critical analysis as opposed to the sites. Analyzing links to media in this way could prove useful. But, it's also important to note the difference between how links to media are different than links between sites or pages. The former type of link is referred to as "transclusion" where one document is partially included in another document. The difference may be important in considering the relationship between culture as "rooted in a locale" (by analyzing pages) vs. "routed" between spaces (by analyzing links and "surfing" behavior). Links that result in embedded media seem to fit somewhere in between.

^{xiv} For two reviews of the debates concerning active versus passive audiences of television and other media, see Kinder 1991 and Buckingham 2000.

^{xv} Not only has the term remixing been used to describe audio, video, and image appropriation. It has also been used to describe the development of software applications that rely on the integration of multiple data sources and services from the Web. In his introduction to the Korean edition to *The Language of New Media*, Lev Manovich (2003) discussed three types of remixes with "new media" as "the remix between the interfaces of various cultural forms and the new software techniques – in short, the remix between culture and computers." He extends his discussion of the importance of this practice in "Remixability and Modularity" (2005).

^{xvi} Nineteen percent of teenagers surveyed reported that they had participated in some form of remixing activity, but again, note that the definition indicated the creation of "artistic" content.

^{xvii} See also: Jenkins (2006) and Manovich (2005).

^{xviii} See also Buckingham's (2007) introduction to the June 2007 issue of *Learning, Media, and Technology* in which he highlights the theme of remixing found across a number of the articles in the issue that also connects the concept to

new media literacies. Unfortunately, I was making the final edits to this chapter just as the issue was released and could not incorporate a more detailed comparison between those perspectives and the one I outline here.

^{xix} See Gilje, this volume, for more on the tensions that can arise when out-of-school media use is brought into a school-based media production class and the possible ethical implications.