

# **Copy and Paste Literacy: Literacy practices in the production of a MySpace profile**

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## **Abstract**

In this paper, I argue that MySpace is an informal learning environment that fosters the development of new literacies. 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 new media literacy.

## Introduction

Over the past year, academics, educators, members of the media, policy makers, law enforcement officials, advertisers, venture capitalists, kids, teenagers, and parents—a *large segment of American society as a whole*—have all turned their attention to a web site called MySpace. MySpace<sup>1</sup> is a site where members, approaching 100 million in total<sup>2</sup>, create profiles of themselves, link to other members, and participate in a variety of activities.<sup>3</sup> For the millions of teenagers who 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 various entertainment sectors, such as music, television, and movies (boyd 2006). They put significant time and effort in creating and maintaining their MySpace profiles. In what ways and to what extent can the production of a MySpace profile represent a locus of new literacy practices?

In this paper, I analyze the creation of a MySpace profile with respect to a framework of literacy that integrates social and technical perspectives. 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 (and other sites like it) 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. This practice calls into question the dichotomies used when describing the social processes of "consumption" and "production" and the technical activities of "reading" and "writing." By integrating recent work in media and cultural theory with research on literacy, concepts such as "participation" and "remix" help provide a useful way of describing this new literacy practice.

## A socio-technical model of literacy

Different theories of literacy present different notions of what it means to be "literate" in society. Some focus 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, Ong 1982). In contrast, the "ideological model" (Street 1995) and "New Literacy Studies" (Gee 1996) shifts the focus from the medium of expression to the social practices in which the medium 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 on 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 model that seeks to integrate these different understandings

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<sup>1</sup> <http://www.myspace.com>

<sup>2</sup> Estimate from Olson, S. "MySpace blurs line between friends and flacks." Retrieved on July 31, 2006 from [http://news.com.com/MySpace+blurs+line+between+friends+and+flacks/2009-1025\\_3-6100176.html](http://news.com.com/MySpace+blurs+line+between+friends+and+flacks/2009-1025_3-6100176.html)

<sup>3</sup> MySpace launched in 2003 and Rupert Murdoch's News Corp bought the site in 2005 for \$580 million. Since its founding, it has become one of the most visited sites each month. For an overview of the site and how some teenagers are using it see boyd 2006.

of literacy is that of Andrea diSessa (2000, in preparation). In this paper, I use this last model to analyze the production of a MySpace profile because of the balance it strikes between social and technical views of literacy and because it provides a lens to view prior debate.

Following years of research on how students take up and use software that his team developed in order to understand principles of physics and promote a “computational literacy,” diSessa (2000) developed a model that defines literacy as:

*The convergence of a large number of genres and social niches on a common representational form* (24, original emphasis).

This model pulls together three theoretical influences. First, literacy practices must be considered within their social context. Second, the uses of representations take on specific patterns, or genres, that must also be taken into account. Finally, the medium-dependent properties of those representational forms matter. In addition, diSessa offers a corollary to this definition: for a literacy practice to be powerful, it must be “two-way,” involving both a “reading” and a “writing” component, thus engaging in current debates on the nature of new media literacy.

#### *Social niches – a social view of literacy*

According to diSessa, a social niche represents the “complex web of dependencies” in communities that allows (or does not allow) various competencies to thrive (24). Echoing Gee (1996), diSessa claims that values, beliefs, community practices, economics, and history play roles in thinking about the development of new literacies: “what we get out of literacies is at best a tentative and culturally relative pursuit” (21). This argument rejects a view of literacy that strictly defines it in terms of the type of media involved or ascribes transformative powers to the media isolated from the social context of its use.

#### *The power of representational forms – a technical view of literacy*

Nevertheless, diSessa distinguishes his model of literacy from a purely social one by emphasizing the medium of expression as an important component. Here, diSessa is building on a theory of literacy that its critics refer to as the “autonomous model” of literacy (Street 1995). The first aspect of this view is an implicit assumption that the definition of literacy is tied to a purely technical process of reading and writing.<sup>4</sup> The second aspect, is that “being literate,” or “having a literacy,” has cognitive and social “consequences” that affect how people think as individuals and how entire societies become organized (Goody and Watt 1968, Goody 1977, Ong 1982).<sup>5</sup>

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<sup>4</sup> An updated version of this view would extend “reading” and “writing” to media beyond text, but still focusing on the technical process of understanding or producing the media.

<sup>5</sup> Note that these authors do in fact address, albeit in some limited ways, the importance of social and cultural issues. For example, the following paragraph from Goody and Watt (1968) has both aspects: “The historical picture of the cultural impact of the new alphabetic writing is not altogether clear. As regards the Semitic system, which was widely adopted elsewhere, the evidence suggests the social diffusion of writing was slow. This was caused partly by the intrinsic difficulties of the system but mainly by the *established cultural features of the societies which adopted it*” (39, emphasis added).

While many have challenged this view (e.g. Scribner and Cole 1981, Street 1995), diSessa argues that importance of the medium of expression should not be so easily discounted. He argues that the properties of dynamic motion and interactivity, both enabled by computational media, can fundamentally change the way students think about a topic such as physics. Different media have different expressive properties, or affordances, 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” (5). Thus, while rejecting “technological determinism,” diSessa (in preparation) is critical of “socially oriented literacy studies that have backgrounded or dismissed the contributions of the ‘props’ of literacy, its technology” (21).

#### *Genres— Linking the social and the technical views of literacy*

The final component of diSessa’s model is the concept of “genres” in the use of media. diSessa defines “genre” as “the specialized form in which we find literacy exercised in production and consumption” (22). He adapts this term from Russian linguist Bakhtin (1986), who discusses genres as a pattern of language that gains stability through specific uses in a “sphere of activity.” (60). According to Bakhtin, generic forms (distinct from the words, the “language form”) shape how we choose our words and construct thoughts in communication; and on the flip side, the generic form we hear in others’ speech shapes how we interpret and construct meaning.

Genre is the conceptual glue that binds social activity to technical activity. In order to understand what literacy might be, one must pay attention to the particularities of social activity, to the particularities of media, and also to the generic forms and competencies that groups share in their use of a media.

#### *(New) Media literacy*

diSessa (in preparation) notes that recent work on new media literacies has helped return a “focus on the medium...to greater prominence,” such as those that look at the range of “multimodal literacies” for the use of new media, literacies that are in part dependent on the affordances of a mode or capabilities of a media (Kress and Jewitt 2003, Hull et al 2006). 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.

Engaging in debates concerning literacy with digital media (see Livingstone 2002, Hobbs 2004, and Livingstone 2004 for extended discussions), diSessa argues that any new media-related practice can only be considered a part of literacy if it involves production as well as consumption. Thus, to be “literate” with computational media, one must learn not only how to use digital technologies, but also how to program computational representations.

## MySpace profile creation and new media literacy practices

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. 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. (221-222)

But are there other ways to become literate in the interactive space of the web? In this section, I argue that diSessa's theoretical framing of literacy as both a social and a technical process is a useful way of understanding the possibility of new literacies in the production of a MySpace profile. However despite diSessa's dismissal of the web's potential for new forms of expression I argue 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. Therefore, this new media form has important implications for the way that we view literacy. Before analyzing the site in relation to the model, it will be useful to understand why MySpace profiles look the way they do.<sup>6</sup>

### *The MySpace profile – a social representational form*

A MySpace profile is an often colorful and media-intensive web page, where members describe themselves, their interests, and link to friends. Many teenagers' MySpace pages consist of a mish-mash of text, pictures, animated graphics, bright colors, and sound; they look much different than the default page with which every member starts. What technical and social skills did these teenagers have to use in order to create their pages?

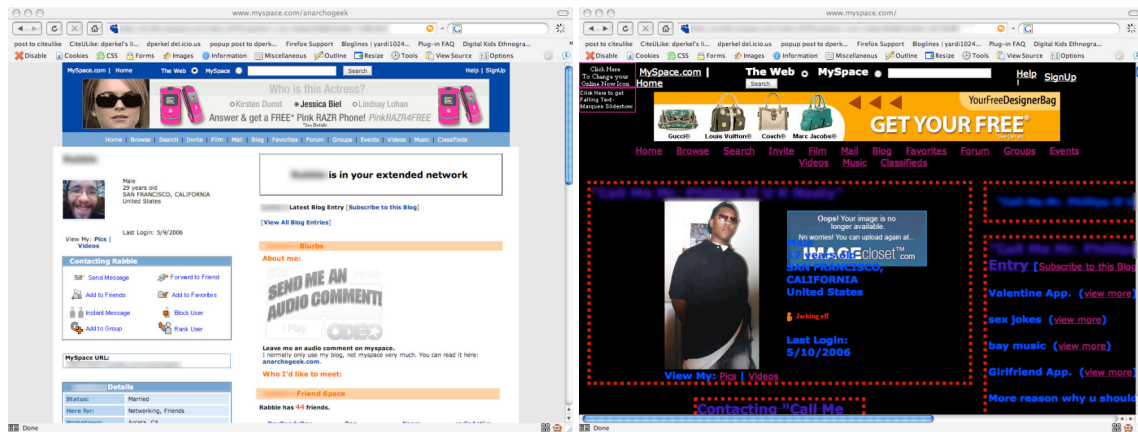
There are a number of technical factors that account for why different members' MySpace pages can look (and sound) radically different from one another.<sup>7</sup> First, members can use the profile forms to enter HTML and Cascading Style Sheets (CSS) code that override the parameters that control the basic “look and feel” of a page,

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<sup>6</sup> This discussion of MySpace is based mainly on my own experiences using the Web site, supplemented with some observations of teenagers using or discussing MySpace from another ongoing study. With two colleagues, I spent several months at San Francisco-based technology center that runs classes for middle-school and high-school age students in a number of different areas of media production (including television production, animation, and graphic design). Before class, during breaks, and after class, we had a chance to observe and interact with many students using MySpace.

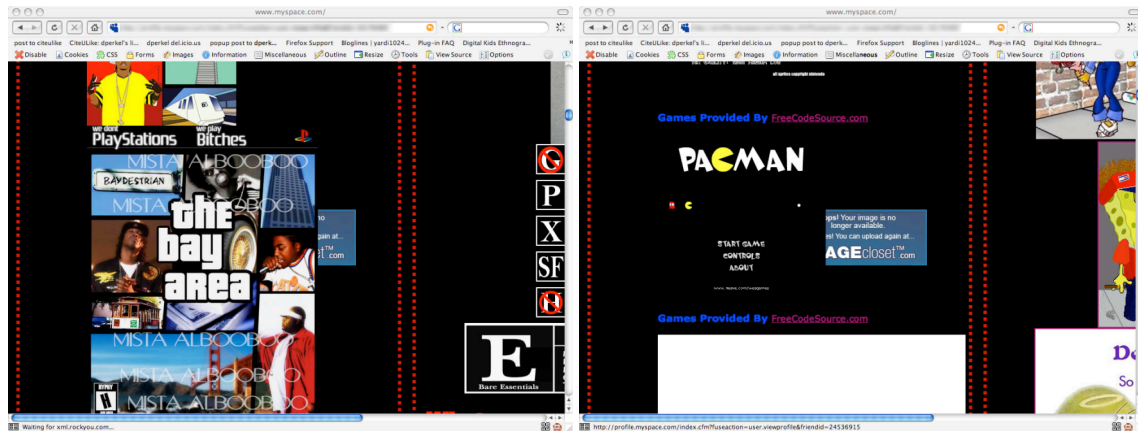
<sup>7</sup> Here, I do not consider the use of text on MySpace. MySpace, though, provides few limits on the amount of text one can enter, and the visual importance of large or small blocks of text as visual elements should not be disregarded. As Kress (2003) argues, “On the screen the textual entity is treated as a visual entity...” (65, original emphasis).

including background colors, font sizes, font colors, borders, and background images (see Figure 1).



**Figure 1: Two MySpace profiles. The one on the left uses the default layout and colors. The one on the right uses different styles to change visual elements.**

Second, members “embed” media in their pages by pasting code that links to images, video, audio, and even games (see Figure 2). 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.<sup>8</sup> In linking to media in this way, members give up some control of what appears on their page and how it might change over time.<sup>9</sup>

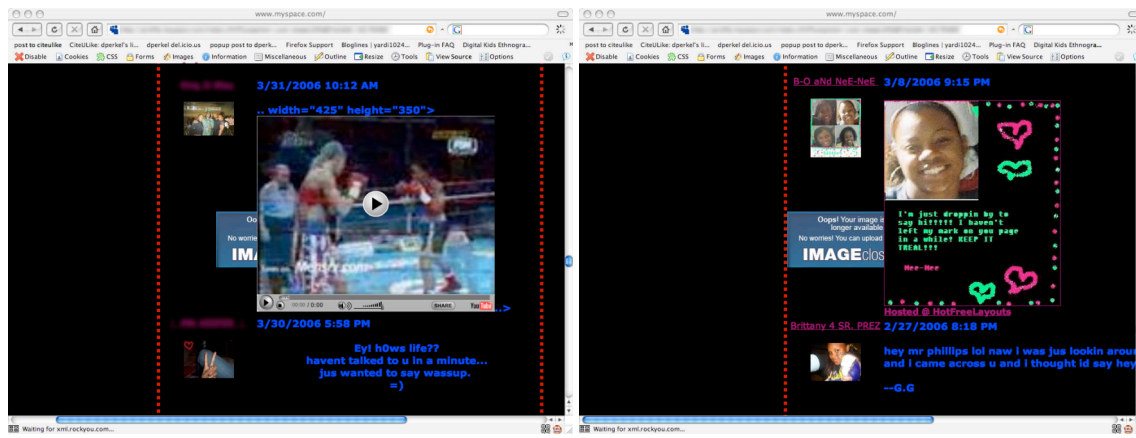


**Figure 2: Embedded images and other media in a profile**

<sup>8</sup> This often results in visitors to profiles having to do a great deal of horizontal scrolling. Not only is this unusual with respect to the rest of the web, it gives the profiles the sense of a virtual canvas and accounts for some of their chaotic feel.

<sup>9</sup> Servers that host the media can (and do) go down; their owners sometimes remove files. In the screenshots in Figure 2, for example, the partially obscured blue box in the middle of the page is actually a message from a service (“ImageCloset”) indicating that the original background image is no longer there.

Finally, people can make comments on other people's pages that often include embedded media (see Figure 3), with the same aesthetic effects just described. 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 3: Comments can include textual messages and embedded media in a profile's comments. The image on the left shows a video hosted at YouTube.com. The one on the right uses an image hosted at HotFreeLayouts.com.**

Therefore, in looking at how pages come to look the way they do, it is difficult to isolate the technical practices from social ones. A model 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 representational forms.

### *MySpace profiles and social niches*

The features and uses of MySpace demonstrate a convergence of many web predecessors. It is a “social networking” service that lets people expose and navigate their networks of “friends” (or contacts) and meet people through others. It has features to support blogging, bulletin boards, synchronous instant messaging (IM), asynchronous messaging (like e-mail), online-dating, and photo sharing. For many, MySpace is an interactive alternative to personal homepages. In summary, many people come together and use MySpace to engage in a variety of social niches and online social activities, such as maintaining friendships, distributing music and video, self-expression, and event coordination.

### *Generic forms in a MySpace profile*

Within those niches, the creation of a MySpace profile involves an understanding of many generic forms and use of generic competencies. Bakhtin argues that, “genres must be fully mastered in order to be manipulated freely,” implying both a mastery of both recognizing generic forms and using them, or generic competencies (80). With regard to generic forms of language, for example, 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. In a discussion with teenagers about MySpace, we heard teenage girls contrasting “associates” and “friends” in everyday language with how “friends” is used on MySpace.

On the other hand, the use of the word *can* be similar to how it might be used in other contexts. For example, one boy teased two of the other researchers about how few friends they had on their MySpace profiles, indicating some level of status that comes with more friends. Therefore, “friends” in the context of social activity on MySpace sometimes means something different than it might otherwise mean in a different context, but not always. Untangling the various meanings in order to use the word correctly, requires a mastery of the genre.

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. But, within some groups on MySpace comments are not in response to a particular piece of writing; they provide a way to “check in” with someone, engage in a contest for status (“comment wars”),<sup>10</sup> and share media, just to name a few observed practices.

#### *Generic competencies required to create a MySpace profile*

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. While I came into the process experienced with web programming languages, it took a great deal of effort for me to figure out how to use my knowledge on MySpace.<sup>11</sup> The FAQ encourages members to go and “meet new people” in order to get help. I discovered “member” profiles that were a collection of tutorials written by a number of different people. I also searched outside of MySpace and found a multitude of resources. Various people (individuals and groups) have created web pages that are dedicated to providing code, templates, and “code generators,” for customizing many different aspects of a profile. Finally, 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. My entire approach relied on some fairly generic competencies, ones that I have used before in learning other programming languages and communities of software development share in general.<sup>12</sup>

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

By looking at the social niches and genres found on MySpace in the process of customizing a profile, diSessa’s model of literacy as the “convergence of social niches

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<sup>10</sup> Teenagers repeatedly asked members of our research group to log in and make a few comments on their pages so that they would have more than friends of theirs. They also liked to tease researchers about how few comments they had.

<sup>11</sup> Note, however, that the MySpace FAQ says that it is “easy” to customize a profile and “requires only a basic knowledge of HTML (the programming language used to create web pages on the Internet).” This language seemed to assume a particular understanding of what “basic knowledge” meant. See: <http://collect.myspace.com/misc/faq.cfm?question=1>, retrieved March 24, 2006.

<sup>12</sup> 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.



and genres on a common representational form” has proven to be a useful analytic tool for understanding aspects of a MySpace profile. However, it is still unclear what the technical skills involved are, and how they relate to diSessa’s argument that for a new literacy to be “powerful,” it needs to embody new expressive possibilities.

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 computational 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, new, medium-dependent form of expression that should not be subordinated to coding.

### *Learning to code HTML and CSS using MySpace*

I was initially concerned with the coding skills MySpace profile customization involves and, in speculative response to diSessa’s notion of “material intelligence,” how people’s thinking might change when using them. 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 code between what the text says from what the text 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.

HTML and CSS, like other programming languages, encourage a particular way of thinking about problems. For example, learning to use them requires learning how to think modularly. The rhetoric concerning the separation of content and style, however useful, embodies a certain way of understanding communication. When people talk about the importance of separating them in practice, it is often to say how one can get the same “message” across in multiple ways, just by changing the style (a new style sheet for different devices, for example). The idea that same message in different form is still the same message implies that social context of use, the specifics of the activity, and the specifics of the medium have little importance in determining meaning. Regardless of how one feels about this rhetoric, learning to think this way, uncritically, may have important consequences. 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. 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 point 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 things like font colors (for example, making a style named “yellow” actually be red, and so forth). The purpose of using CSS at all is completely defeated. MySpace's use of CSS is so problematic that it may technically “better,” never mind more practical, to control fonts using HTML tags, a practice that has long been discouraged by standards bodies and programming communities but is encouraged on some forums. This might be fine for creating web pages, but any new way of thinking or solving problems is lost.

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. As a consequence, while there are still reasons to suppose that learning these skills is potentially the technical aspect of a new literacy, MySpace is not the environment in which learning them could thrive, at least not without changes in its implementation.

### *The power of copy and paste*

Nevertheless, MySpace is an environment in which we are beginning to see a new practice establish a strong foothold, one that is also dependent on the nature of HTML and web technologies: the copying and pasting blocks of code in a conscious 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. Members reuse popular images by copying and pasting an HTML link to any image on the web. They “embed” video, audio, and even games on their profiles.<sup>13</sup> Furthermore, new companies are emerging 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. In the writing of this paper, for example, I made extensive use of copy and paste functionality, which allowed me to hold on to old ideas, rearrange them, and recombine thoughts, in multiple ways through the writing and revision process. 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, sounds, music, video, cartoons, games, and even interactive applications. Second, members can continuously update what their profiles looks like, 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

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<sup>13</sup> After reading through various forums, I also suspect that for most people, changing background colors and fonts is as much about copying and pasting “templates” (in reality, blocks of HTML and CSS code) from one of hundreds of options people have created than it is about learning to change the code parameters, though some people do seem interested in how to make modify the code further.

dependency between people's creations. In other words, as Bakhtin (1986) argued about speech, members' pages are: "filled with other's words, varying degree of otherness or vary degrees of 'our-own-ness' ...their own expression, their own evaluative tone" which members "assimilate, rework, and re-accentuate" (89). 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.<sup>14</sup>

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* the "create dynamic and interactive documents," to which diSessa refers and millions of people (and 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," but is somehow both simultaneously.

### **Participation and remix—new conceptual tools**

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'" (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 (112). This sort 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 (1984) 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'" (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" (46).

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<sup>14</sup> Livingstone (2002:226-229) talks about 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.

Ito (forthcoming) builds on these arguments and debate concerning active and passive media audiences<sup>15</sup> 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” (4). Ito offers 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?’” (5). Ito’s account of participation is similar to Gee’s (1996) view of literacy as or being able to participate in a community (including using its tools) that one did not learn in one’s initial socialization in life<sup>16</sup> (see also Gee 2003).

If “participation” is a socially oriented word that challenges the consumption/production dichotomy, then “remix” may be its technical counterpart to bridge the reading/writing dichotomy. The word “remix,” originally used to describe the mixing of music samples, has itself been appropriated over the past few years to describe the mixing of a variety of media forms to create new products.<sup>17</sup> The Pew Internet and American Life Project used the word “remix” on a recent study (Lenhart and Madden 2005) of teen content creation, implying the creation of new “artistic” content from prior media forms.<sup>18</sup> But there is no reason to constrain “remixing” practices to the development of “artistic” creations as that study defines the term.<sup>19</sup> If “remixing” is used to describe the technical practices required to blend text, images, video, audio, and games in the creation and maintenance of a

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<sup>15</sup> For two reviews of the debates concerning active versus passive audiences of television and other media, see Kinder 1991 and Buckingham 2000.

<sup>16</sup> Gee (1996) defines literacy as the “master of a secondary Discourse,” where a Discourse is “...a socially accepted association among ways of using language, other symbolic expressions, and ‘artifacts’, of thinking, feeling, believing, valuing, and acting that can be used to identify oneself as a member of a socially meaningful group or ‘social network,’ or to signal (that one is applying) a socially meaningful ‘role’” (131). Early in people’s lives they learn a primary Discourse and then learn to master others.

<sup>17</sup> 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.” Retrieved on July 25, 2006 from [http://www.manovich.net/DOCS/Introduction\\_Korea\\_2003.doc](http://www.manovich.net/DOCS/Introduction_Korea_2003.doc). He extends his discussion of the importance of this practice in “Remixability and Modularity” (2005). Retrieved on July 25, 2006 from <http://www.manovich.net/>.

<sup>18</sup> 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.

<sup>19</sup> However, in a recent perspective on the role of remixing in learning, Henry Jenkins argues that even some of the “classics” of literature (e.g. *Mort d’Arthur*, the *Odyssey*) and art (the ceiling of the Sistine Chapel) are “remixes.” See Jenkins, H. (July 13, 2006) “Learning by Remixing” retrieved on July 20, 2006 from [http://www.pbs.org/mediashift/2006/07/learning\\_by\\_remixing.html](http://www.pbs.org/mediashift/2006/07/learning_by_remixing.html). See also Manovich (2005), footnote 15.

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.

Remixing 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” (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. To adapt diSessa’s vocabulary, one could see remixing as a sign of a new, *networked material intelligence*. Through MySpace and sites like it, knowing how to re-use media in this way, socially and technically, has become foundational for communication and creative expression over the web.

## Conclusion

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.” 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). In this paper, 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 a new form of literacy practices, and that those practices, to some extent, are dependent on a particular representational form. Understanding it further would require a look at the social practices 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 MySpace 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. Therefore from the perspective of being “media literate,” in the way that many use the phrase, copying and pasting is antithetical to a literate practice. But, on the other hand, from other social niches, such as software development, copying and pasting is routine and is a fundamental part of everyday practice. Understanding when, why, and how to re-use code are among core competencies. The question for us 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?

An “ideological” perspective points out that even the word “literacy” is loaded with meaning and has ideological implications. Policy makers or educators might make the following circular argument: If some set of skills is a fundamental part of “literacy,” it should then be taught formally in schools and made a part of our public education system.

If whatever that thing is seems socially undesirable,<sup>20</sup> then we can't teach that thing in school. Therefore, whatever those skills are, they cannot be part of a set of literacy practices.

Nevertheless, millions of 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. 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 acquired 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, or lost, by having them accepted by educators as an aspect of new "literacy."

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<sup>20</sup> MySpace has been has received a great deal of negative press over the past year and has been banned in many public schools around the country. See boyd 2006 for more discussion.

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