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ARTICLE

Designerly = Readerly

Re-assessing Multimodal and New Media Rubrics for Use in Writing Studies

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Abstract / In this article, I draw on Gunther Kress and Theo van Leeuwen's (2001) *Multimodal Discourse: The Modes and Media of Contemporary Communication* and Lev Manovich's (2001) *The Language of New Media*, which have become prevalent texts in US writing studies fields, to describe the rubrics they use and show how they help readers determine the materialities of multimodal or new media texts. I also argue, however, that writing studies scholars should not rely solely on these rubrics because they function in designerly, not readerly, ways that would help readers understand a text's rhetorical situation. I apply the rubrics to a new media text, 'While Chopping Red Peppers' (Ankerson and Sapnar, 2000), to show their limited use and to suggest that while these multimodal and new media theories have a place in writing studies, we need better methods and/or reading heuristics in order to interpret (and teach) such works.

Key Words / analysis / design / designerly / multimodal / new media / purpose / readerly / rhetoric / rubric / writing studies

Introduction

In the USA, 'writing studies' refers to the fields of composition and rhetoric (and not to creative writing or other aesthetic fields – a shame since creative writers have been the impetus behind a shift in composition practices to literary hypertext, hypermedia, and, now, new media). In this article, I turn my attention to writing studies to show that some of their most-discussed multimodal and new media scholarship does not offer a way to teach students how to sufficiently analyze new media texts. Analysis and interpretation of new media texts is becoming more important as writing studies shifts from *writing* to *composing in multiple media*. We have seen this shift take place in the topics of conference presentations, teaching, and scholarship in the field, moving from writing to digital writing to visual literacies to explorations of design. As teachers incorporate design into writing classes, they consistently look to a few scholars to inform their work (e.g., Bolter and Grusin, *The New London Group*, Kress, van Leeuwen, Manovich, and Wysocki).¹ These scholars (especially Kress and van Leeuwen and Manovich) offered readers two

incentives: (a) multimodal and new media scholarship that writing teachers could relate to, and (b) rubrics applicable to new media designs that were easily adaptable to classroom situations. Rubrics can be tricky, however, in that divorced from their context (and sometimes even *in* context) their usefulness is left unevaluated in favor of their ease of use. I am not suggesting that Kress and van Leeuwen's or Manovich's rubrics are not useful (in fact, I discuss them at length below), or that writing studies has inaccurately used them, but I do want to argue that writing studies needs meaning-making strategies more *readerly* than the initial rubrics these scholars have offered. While the term *readerly* might connote passivity in reading habits – unlike its counterpoint, *writerly*, which tends to connote active reading processes – I intend, here, for *readerly* to be used in comparison to *designerly*, which I define as an interpretation strategy that focuses on the materiality with which a text is composed. In contrast, I use *readerly* to show that readers can actively discover meanings in a text that writing studies would find useful according to its literary, rhetorical, and aesthetic traditions.

The problem with *designerly* interpretation strategies, as I see it, is that rubrics pulled from Kress and van Leeuwen's and Manovich's theories have not yet addressed rhetorical situations of design. That is, these rubrics do not help writing teachers understand how multiple modes make meaning in a text. Instead, what Kress and van Leeuwen's four strata of multimodal communication provides is a way to discuss design processes of a text – from the perspective of a designer. What Manovich's five principles of new media provides is a technological checklist for whether a text is new media or not. While his rubric can be used by readers, interpreting a new media text according to what technological components a designer chose does not help writing teachers explain a fuller picture of the new media elements a text uses as a product of audience, purpose, and context. So, in this respect, Kress and van Leeuwen's and Manovich's rubrics are geared toward understanding *designerly* processes instead of *readerly* ones. What is needed – and, yet, what this article does not do, in favor of showing *why* this other thing is needed – is a middle ground: a way for writing teachers to help students interpret all of the modes of communication (as well as the *designerly* processes) in a new media text. I have written elsewhere what such a heuristic might look like (Ball and Arola, 2004; Ball, under review). For instance, *ix: visual exercises*, which I co-wrote with Kristin Arola in 2004, is a CD-ROM textbook that helps students and teachers new to visual rhetoric (and, in my opinion, new media) use terms from rhetoric, film studies, and graphic design (among other fields) to analyze a range of multimodal texts including magazine ads, photos and captions, collages, digital videos, and interactive new media texts like the creative FLASH-based text I analyze later in this article. For now, however, I turn to explaining the problem that precedes that heuristic – how multimodal and new media rubrics offer *designerly*, instead of *readerly*, interpretation strategies for new media texts.

Multimodal Theory as a Designerly Strategy

For writing studies scholars, the heart of multimodal theory started with The New London Group's (NLG) publication, *Multiliteracies: Literacy Learning and the Design of Social Futures* (Cope and Kalantzis, 2000). In that text, the authors argued that processes of design can be used to change curricula from a singular, alphabetic emphasis to one of multiple modalities. The notion of *design* laid the foundation on which a *pedagogy of*

multiliteracies could be enacted. That is, teachers could (and should) incorporate the analysis and production of multimodal texts into their curricula. The NLG offered six modes of communication – linguistic, audio, spatial, gestural, visual, and multimodal (p. 26) – that can create meaning in a design. A text's design, which uses those modes (and the materialities that comprise specific elements within those modes), is presented through a medium (or media) in which a multimodal text is distributed (p. 186). Designing is a cyclical process. This process consists of a designer engaging, or cycling through, three parts: (a) understanding *available designs*, (b) *designing* the text, and (c) presenting the *redesigned* product (p. 23). Let me briefly explain each of those parts. Available designs include 'discourses, styles, genres, [and] dialects' (p. 21). These are the standard designs, like genres and conventions, that composers are aware of and work within. Designing, the next part of the process, happens when a designer transforms one (or more) of those known, available designs into something new. That new design results in the redesigned text, which is the third part of the process. So, similar to Bolter and Grusin's (2000) discussion of how new media remediates old media and the old is remediated because of the new, the process of designing a multimodal text based on available designs to produce a redesigned text – and the accompanying weaving back-and-forth, in-and-out, between these revision processes – shows the process through which a multimodal text is created.

Writing studies teachers can easily understand this cyclical design process because it is similar to the revision process in writing. What makes the NLG's contribution to writing studies significant, then, is the introduction of the language of design – that is, that 'all texts are multimodal' (p. 187), which requires teachers to engage in this larger design process (as opposed to the singular mode of the writing process, which is how most English teachers think of writing). Perhaps for writing teachers, Kress (2000; an NLG member) best spoke to writing teachers, showing them why it is important to recognize that texts are often multimodal – that even written text, for instance, cannot be 'monomodal' because audiences typically read written text within the context of its larger materiality (e.g., via the paper on which it is printed; the screen on which it is distributed) (p. 184). This recognition that all texts are multimodal – and that nonwritten modes carry semiotic meaning – was a crucial step in how writing studies has been able to embrace the production and analysis of new media texts. Many who were looking to the NLG may have thought that Kress and co-author Theo van Leeuwen's book, *Multimodal Discourse: The Modes and Media of Contemporary Communication*, might be the key to teaching students to read multimodal texts.

In *Multimodal Discourse*, Kress and van Leeuwen (2001) built on the multiliteracies tradition of the NLG by arguing that readers and designers assign semiotic meaning to all of the 'modes deployed in a multimodal object/phenomenon/text' (p. 28) from which a unified interpretation of the elements in a designed text can be made. The authors provided four strata to help readers understand the process of designing multimodal texts. These strata – *discourse*, *design*, *production*, and *distribution* – are not hierarchical; rather, they are cyclical and process-oriented, weaving through and crossing over each other to produce a final text. Kress and van Leeuwen's notion of *discourse*, the first stratum, is defined as 'socially constructed knowledge' (2001: 4). In other words, designers must start from what they know – from the cultural, social, intertextual, technological, historical, and other discourses available to them. The second stratum, *design*, helps

designers use 'semiotic resources [to realize] discourse in the context of a given communication situation' (Kress and van Leeuwen, 2001: 5). Thus, design is the stratum during which a designer fulfills a rhetorical or aesthetic situation by choosing appropriate and available modes and media to use in a multimodal text. At the same time, a designer must take into account how to *produce* a text (e.g., in what software program) – the third stratum – and this will affect her choice of modes that can be accommodated in a particular medium. The fourth stratum, *distribution*, adds another layer to the process because the designer must decide how to get the text to readers, which also plays a role in what production medium she chooses and, thus, what modes and materials she will use in designing a text. Thus, the four strata overlap significantly in that a designer cannot compose a text without accommodating each strata during the process. For instance, if a designer knows that her text will be distributed on a website rather than a DVD, then she might choose to design the text using smaller video clips (for easier streaming and download times) as well as to produce the text in FLASH rather than DIRECTOR because of FLASH's better movie-compression and streaming capabilities. Then, using FLASH might limit, or change, which modes she uses to accomplish the rhetorical situation for which she aims. What is important to note in the outline of the four strata is that they describe only part of the considerations a designer must make when composing a multimodal text. The strata take into account which modes and materials a designer uses and also which technologies she uses to produce and distribute a text. But the strata do not address how or why a designer chooses specific modes or elements when creating that text.

To explain how these strata function in a designed text, Kress and van Leeuwen (2001) analyzed a broad range of social and cultural texts. For example, they demonstrated how the four strata can be used to understand a child's bedroom advert, which I summarize here:

- discourse = public housing projects in Vienna, family homes in Disney's *Toy Story*, working-class homes in Amsterdam, IKEA catalogues, and child-rearing practices
- design = color, spatial arrangement, etc.
- production = print advertisement
- distribution = *House Beautiful* magazine (pp. 11–17)

In explicating the design elements of this advert (e.g., color, spatial arrangement, etc., as understood through the discourse of interior design), the authors attempt to show a readerly interpretation. However, what is missing from their interpretation is the larger rhetorical purpose – the 'so what?' of this advert. Readers see gestures towards a rhetorical interpretation in the elements that Kress and van Leeuwen point out in the advert (e.g., 'the "dado" which runs right around the room and makes "putting your things away" literally an omnipresent feature of the room,' [p. 17]). But such examples point more towards why a designer would choose to include that particular element than what the combinations of all the above-mentioned designed discourses mean for readers. And then there is the issue of applying this rubric to a digital, new media text like the ones that writing teachers are assigning more often (e.g., video documentaries, FLASH-based persuasive texts, Photoshopped visual arguments, etc.).

The example texts in *Multimodal Discourse*, like the child's bedroom advert, remain in comfortable territory for writing teachers because the examples rely on written text

and static image combinations and not on examples that require nontraditional or different reading strategies than those to which writing teachers are accustomed, such as a new media text might.² The four strata attempt to offer teachers (as the book's main audience) a way to analyze multimodal texts by breaking them into smaller units of meaning, a process which would be useful in relation to new media texts that are often designed with multiple modes; but the strata neither help readers make meaning from those individual modes nor do they help readers combine modal meanings in a readerly interpretation of a text, as writing studies teachers would find necessary in order to teach analysis or construction of a text.

Four Strata Show Designerly Processes

What the following example shows is that readers can interpret a new media text by applying Kress and van Leeuwen's rubric, but that analysis is limited by the designerly intentions of the four strata. What the strata do help with is in recognizing the modes, media, and materialities in a text. In other words, the strata show *how* (and with what materials) a designer created a text but not *why*. Let me now apply each stratum to a sample new media text. For this example, I use a FLASH-based text called 'While Chopping Red Peppers' (Ankerson and Sapnar, 2000) because it is a multimodal text that combines all five of the NLG's basic modes of meaning – linguistic, audio, spatial, gestural, and visual. While I will provide a more robust interpretation of this text later in this article, readers might need to know now that 'While Chopping Red Peppers' is a poetic text that demonstrates the tense relationship between the speaker, characterized as a daughter, and her father. As I will show, these strata do not necessarily help a reader to determine the designer's purpose in choosing specific elements, modes, or media; a missed opportunity that would help a reader analyze the text in a way useful to writing studies.

The production medium and distribution method are good places to start exploring Kress and van Leeuwen's strata in 'Red Peppers' because those strata will necessitate some of the design choices. For instance, 'Red Peppers' was created in the production program Macromedia FLASH, indicated on the initial HTML title page that a reader sees when entering the text from its distribution point, the website *Poemsthatgo* (<http://www.poemsthatgo.com>). FLASH uses a timeline from which all elements perform. Using this program, a designer can, among other options, (a) add physical interactivity to a FLASH text using a scripting language; (b) create motion tweens, in which an element changes shape, size, speed, rotation, color, and so on, depending on the initial and concluding keyframe of that element; and (c) synchronize modal elements such as an audio track timed to change with a tweening graphic object. These features allow a designer to make choices about the text's design that other programs would not have afforded at the time. (This text was designed in 1999, at a time when FLASH was one of the few prosumer programs that allowed for the kind of features mentioned above.)

For instance, one constraint in distributing this text as a FLASH movie is download time, which depends on a reader's modem speed. Additionally, a reader is required to download and install the FLASH PLAYER plug-in to read the text. On a dial-up modem, this download might take an hour or more, by which time a reader's chance of returning to the *Poemsthatgo* site to watch the text would have been lost among procedural processes. (Of course, this process changes drastically as the technology changes from

dial-up to broadband. However, I offer this comparison to indicate that when the text was created in 1999, dial-up modems were the most common method of web access and still are in many parts of the world.) Distribution accounts for FLASH being the delivery method but not how the distribution process might affect a reader's interpretation of a text. That is, using distribution to approach the text in a readerly way does not advance our understanding of how a designer's use of an online FLASH text helps achieve the rhetorical purpose of the text itself. This is what Kress and van Leeuwen meant when they suggested that distribution media are not necessarily intended to add significant meaning to the text; although a reader can make an educated guess as to why the designers used FLASH and the Internet as distribution methods even though that information may not contribute to analyzing what some readers might refer to as the content of the text.

Analyzing the production medium in 'Red Peppers' also limits a reader's rhetorical interpretation. In several sections of 'Red Peppers,' voiceovers are heard at the same time that written text appears on screen (usually the same words as those that are voiced). This synchronization occurs because the designer was able to place those elements in relation to one another on the timeline. Many readers may not understand how the timeline functions in this piece – only, perhaps, to know that there *is* a timeline. The designers constructed the piece to follow the internal timeline without reader manipulation, so the text follows an always-predetermined path. Most readers would realize this from watching the text (even though I have seen some readers who wanted to click to find hidden links). A question to ask then is what meaning is gained, if any, by a reader who recognizes that the designers chose to limit the interactivity of the text? And, then, applying that question to the text's rhetorical situation: What does that designerly limitation in the production process mean in relation to the purpose of the text? Readers can hypothesize about its meaning, but answering a question such as this seems to be more a matter of recognizing the use of specific technologies, which, in an a-rhetorical move, situates the technology outside/apart from the text's content. Determining the production medium shows readers the abilities and constraints of technologies, which can lead us to eventually ask rhetorical questions about the connections between form and content; but such imaginative leaps from rubric terms to readerly interpretations are not necessarily supported or encouraged when readers are asked to separate the technological production materials from what readers are used to labeling 'content.' That is, if readers recognize that 'Red Peppers' follows pre-determined paths based on a production/distribution analysis, the rubric does not specify to take the next step to figure out why the designer made that choice. Readers (including some writing teachers) know that leap in making-making is possible with this rubric, but an audience new to interpreting new media texts may not, and that is where I see the potential hazard of applying only these designerly rubrics when analyzing new media texts.

The next stratum to explore is design, which asks readers to acknowledge the various semiotic modes in a text. In 'Red Peppers,' the semiotic modes specifically include recurring vector (algorithmic) graphics of a red pepper, a blurred outline of a girl, a knife, and a palette of vegetables, among others. The designers more generally used color, shape, audio, animation, and written text. While each of these modes carries meaning within the text, using the basic definition of the design stratum – semiotic resources that fulfill the designer's available discourses in a communication situation – does not

necessarily help readers understand how and why those resources contribute to a rhetorical interpretation of the text unless the reader has already formed an interpretation through some other means. In other words, how have the modes a designer has chosen relate to the discourses a reader assumes (guesses?) that the designer knew? The answer to that question is that readers cannot know what specific discourses a designer intended to draw from, but a reader can apply her own discourses to understanding meanings of individual elements within a text.

In 'Red Peppers,' there are recognizable design elements from which I could determine designerly discourses. For instance, repeating graphic elements include a knife, a red pepper, a palette, and a slouched girl. Or, in the written text, a few of the major nouns and verbs include the words (most of them also spoken), 'knife,' 'father,' 'red pepper,' 'presentation,' and 'chopping.' I could surmise that these combinations of written, spoken, and graphic elements could indicate discourses of family and cooking. While there are many discourses at play in this text (e.g., digital and traditional poetics and father–daughter bonds), being able to determine discourses in a text, from a reader's viewpoint, requires a reader to be able to pick out significant (and connected) elements and determine their collective meaning (using, perhaps, a cluster-analysis or generative-analysis model; see, e.g., Foss, 2004). This part of the interpretive process is only hinted at in Kress and van Leeuwen's notion of discourse. Overall, the four strata function perhaps exactly as Kress and van Leeuwen (2001) intended – to describe the processes a designer encounters when creating a multimodal text. Readers who have never read 'While Chopping Red Peppers' likely will not have an interpretation of the text after applying only the four strata because the strata were not intended to function in readerly ways. Neither, I argue, were Manovich's principles of new media, as I demonstrate next.

New Media Theory as Designerly Strategy

In *The Language of New Media*, Manovich (2001) interpreted *new media* in relation to *old media*, following a tradition of remediation (Bolter and Grusin, 2000), but Manovich focused mostly on digital new media and its historical connection to cinema. He described new media as being multimodal and digital and included in his definition five principles that texts must meet to qualify as new media objects: *numerical representation*, *modularity*, *automation*, *variability*, and *transcoding*, each of which I describe below. Through the five principles of new media, Manovich offered a standard set of technologically related discussion points regarding digital texts (see, e.g., Sorapure's [2003] excellent discussion of these principles at work in her students' texts), but rather than offering ways to read texts, these principles only describe or categorize texts into *new media* or *not*. Below I outline the five principles of his rubric and show how they limit readings of new media texts like 'Red Peppers' to designerly ways.

Five Principles Show Designerly Processes

Manovich's (2001) first principle, numerical representation, indicates that new media are digital, mathematical, and algorithmically manipulated (p. 27). The text I have been examining, 'Red Peppers', is obviously digital because it is presented via a computer, which requires that a text be made up of numeric (binary) code, among other coding

and scripting languages. In addition, a reader familiar with FLASH would recognize the text's motion tweens as algorithmic manipulations of the elements. According to Manovich's definition, most any text that is or can be digitized can also be a new media text, as long as it also meets the next four criteria. Thus, numerical representation asks readers to determine whether a text is (or can be) digital. A readerly question to ask at this point would be, if a text is digital, what does that designation mean in relation to the text's intention/purpose? Is it even possible to determine or clarify a text's purpose by knowing it is numerical in design? I believe that such an interpretative connection would be nearly impossible to make, especially for readers new to new media. Sophisticated readers might be able to hypothesize, for instance, that because 'Red Peppers' is digital, the designers were able to use motion tweening, which could be interpreted in relation to purpose in X way; but the leap between the yes-no option of numerical representation and what that means rhetorically is a chasm that some readers and writing teachers would have a difficult time making.³

Manovich's (2001) second principle of new media is modularity, which can be described as 'the fractal structure of new media' such that individual elements of a new media text 'are represented as collections of discrete samples' that are 'assembled into large scale objects but continue to maintain their separate identities' (p. 30). In other words, new media are composed of smaller, individual pieces. FLASH offers modularity to designers because it uses individual elements within a library, for instance; the modularity of these individual elements is evident in that a designer can use them for multiple texts, or multiple times within a single text, without changing their basic identities. Readers of 'Red Peppers' might recognize the repetition of certain graphic objects as representing the text's modularity. Modularity also implies that an element of a new media object 'can always be edited with the program originally used to create it' (p. 30). For instance, each element in a FLASH text such as 'Red Peppers' can be edited at any time by a designer and exported to a new text. In the editable FLASH file of 'Red Peppers' (which the designers supplied to me), two typefaces were used – an Arial-like font and a Times-like font (each were used to represent a different speaker in the text) – but the public, online version of the text includes only one typeface. Perhaps the designers took advantage of the modularity of the text and changed the font before they published and distributed the piece. That would be the designerly question. The readerly question would be 'why?' Most readers wouldn't know a switch in font had occurred, even though it is obvious from a designer's perspective (given the original file). Readers might need to approach understanding modularity by asking whether, for instance, the repetition of elements in 'Red Peppers' is significant to its meaning. But that question is far away in rhetorical purpose from being able to recognize that this text is made up of 'discrete samples' that are always able to be edited, as Manovich defines it.

Automation is perhaps the most a-rhetorical of Manovich's principles. It refers to 'creation, manipulation, and access' processes that, Manovich argued, removes human intentionality from a text (2001: 32). Automation is often a transparent process for designers because software programs have removed the tediousness and difficulty of non-automated tasks so that changes in an element happen instantaneously. In Adobe PHOTOSHOP, for instance, a designer can manipulate an image by choosing a layer and adding a layer style, filter, and additional effects to change the meaning of the image. The algorithmic processes that change the original image to the filtered image do so

without the designer seeing how each pixel of that image changes. In this way, the automation process is transparent to the designer. He or she does not expect to see how the image changes, only the final product. In 'Red Peppers', readers see a graphic of a red pepper change from the size of a small fist to the size of a head (part of which is out of view because the pepper extends outside of the frame). One of FLASH's built-in automation processes called *tweening* was used to create the size change. The tween option composes every intermediate frame, making the pepper larger in constrained proportions to the original so that, upon playback, the pepper appears to grow. The designer did not have to create every individual frame of the pepper to make it grow. Tweening is automation in action. But why is it important that the process of automation occurs within 'Red Peppers' (or within any new media text)? Automation focuses on the machine-production aspects of a text, which does not help readers interpret the significance of the growing pepper in relation to the text's purpose. Only when the text is placed within larger cultural (and artistic) contexts can the significance of tweening be taken up in any particular text. I should note that Manovich does address such contextual issues when he describes the connections between digital new media texts that use multiple modes of communication and the history of cinema. However, these larger discussions tend to focus on how certain technologies make this connection possible rather than what those technologies mean for readers (other than making the texts accessible).

New media, according to Manovich, 'is not something fixed once and for all, but something that can exist in different, potentially infinite versions' (p. 36). Those infinite versions are its variability. A designer could create a text based on the same elements he or she had used in another text – arranging the elements in a different order, changing the size, shape, sounds, and so on – and the text would have a completely different effect. The digitality of new media allows for these multiple variations. Without looking at the editable FLASH file, readers would only be able to guess at what elements might be variable within 'Red Peppers'. Readers who know FLASH would know that its library would contain infinitely re-usable elements, like the pepper or the girl's slouching figure. Yet, while that knowledge matters in regards to how the text is designed and produced, it does not have any direct correlation to how readers make meaning from this specific feature of this kind of new media text. Although Manovich's definition of new media brings other texts to the discussion – texts such as databases and virtual reality that would have readerly meaning in relation to variability – I want to point out that 'Red Peppers' is typical of the kind of new media text that writing instructors assign. So, in making the comparison between the readerly ways that Manovich's rubric could apply to his range of new media texts, writing teachers are not using the same foundation of texts in their classes, which makes the usefulness of the rubric less so in these situations.

Finally, Manovich (2001) argued that the structure of a new media text must follow 'the established conventions of the computer's organization of data' (p. 45), which is called transcoding. Thus, new media texts must adhere to digital conventions – from binary code to proper filenames and file extensions to correct plug-ins – so that the text can be properly distributed through a digital device. 'Red Peppers' does follow digital conventions; it is readable through a computer via online distribution in FLASH PLAYER, which means the designer must have followed the proper transcoding conventions. A contrasting example would be if a designer trying to show a photograph on a website presented the image as a PHOTOSHOP file (with a .psd extension, which is not viewable in

a browser) rather than saving the file with a graphical extension that is viewable online (such as a .jpg). There are no visible coding errors in 'Red Peppers' that would prevent readers from seeing the text as a whole. And, yet, transcoding does not suggest what readerly meanings might be inferred from a properly distributed new media text.

Manovich's five principles were strictly geared toward describing designerly possibilities in digital works, which, additionally, can be a shortcoming if a reader does not believe that new media has to be digital as Wysocki (2004) suggests. While the principles can be applied to help readers describe the technical and technological aspects of digital new media, they do not offer a language with which a reader can rhetorically interpret that text. More so, if a reader is not familiar with the technological conventions used in a text, Manovich's principles have little relevance for that person. For instance, the examples from 'Red Peppers' that I outlined above suggest a strong familiarity with how the production medium, Macromedia FLASH, functions. Yet, in the final product for most texts, the medium, according to Kress and van Leeuwen (2001), should be transparent to readers. If a reader is unfamiliar with how FLASH works – or how a designer might use FLASH to create a new media text – then that reader may not even be able to apply Manovich's five principles to determine whether a text is new media or not, let alone understand what the purpose of the text is.

A Readerly Approach

Without a strategy that helps readers interpret the purpose of a new media text, readers will likely not understand the text in a way useful to writing studies. A reader could use Manovich's (2001) principles to see if a text qualified as new media, or they could use Kress and van Leeuwen's (2001) strata to understand how a designer created a multi-modal text. But as my analysis using these rubrics indicated, while they provide a general sense of what the text *is* and, sometimes, *does*, they are limited in being able to construct a readerly interpretation. In contrast, below I offer my own interpretation of 'Red Peppers' using a generative-analysis model. I draw on interpretive strategies in literary and rhetorical traditions with which I am familiar and apply those strategies to the text. In doing so, my reading provides an interpretation more useful to writing studies than Kress and van Leeuwen's strata and Manovich's principles provided, while also showing how technological and designerly issues play a role in a broader analytical approach. Readers should note, however, that this analysis is not intended as a rubric itself, only as one interpretation that might help readers see how design elements make meaning to support the text's purpose.

Many readers, even if they are new to interpreting new media texts, will recognize a text's linguistic features since that is a mode with which they are familiar. For that reason, I start my reading of 'While Chopping Red Peppers' (Ankerson and Sapnar, 2000) by describing part of its linguistic context. 'Red Peppers' can be traced to a tradition of lyric poetry because it invites readers to look into the world of the speaker (a woman) to view and experience her relationship with her father and the tension that it has caused in her life. Traditionally, a lyric poem represents a moment in time, a snapshot, an emotional experience expressed by the author through a speaker. For the audience, it is a chance to see into the window of the poem and the emotions the author presents – a voyeurism by necessity – through the genre of the lyric. An audience *looks in* on a lyric

poem and reacts to the emotions the poet presents. A lyric poem, according to *The New Princeton Encyclopedia of Poetry and Poetics*, is an 'utterance that is overheard' (Mill, cited in Johnson, 1993: 714). The overheard utterance is the voice of the speaker 'mak[ing] the verbal world of the lyric a visible world to the mind of the reader.' Making this internal world visible to readers is the method by which lyric poets comment on and 'evaluate the human condition' (p. 726). 'Red Peppers' is a commentary of the speaker's condition in relation to her overbearing and abusive father. Below I will analyze the text in sequential order – as readers would encounter each *scene*. (The designers used scenes within FLASH to construct the text, so that is how I refer to sections of the text in my analysis.)

The first lines of 'Red Peppers' are spoken in a voiceover as the written words appear on screen: 'In the space/ between my knife and my fingertips/ there is my father.' This text is accompanied by the detailed, static graphic of a shadowy room with a cutting board and a sharp knife (see Figure 1). Visual emphasis is placed on the knife because it is the brightest element and is centrally placed on screen. The knife and its surrounding darkness lends tension, connotative of horror films, to the poem. This tension is compounded by a juxtaposition of multiple modes: the voiceover and written text ('between my knife and my fingertips, there is my father') and images of the pepper being cut. The placement of these elements suggests that the father is metaphorically being held by the female speaker, under her knife. He is in a position to be cut, a dangerous position.

This same screen returns to conclude the poem. The dark-colored and three-dimensional graphics of the opening and closing scenes act as bookends to the bright, mostly white background with colorful visual elements that appear in the bulk of the text. These dark bookends function as a reader's entrance and exit to the text – the opening and closing of a window into the speaker's world – signaling that the reader is being taken into the space of a multimodal lyric, the space of the speaker's memory of an event.

FIGURE 1

The Graphics of the Opening Scene in 'Red Peppers' are also Used in the Closing Scene



As the red pepper moves into the next scene, it becomes more saturated with color, and the background fades until the pepper is the central element on screen. In the pepper, silhouettes of the father overlap the daughter pictured as a young girl (see Figure 2), reinforcing the tension by showing visually his power over her. The pepper then tweens to become a red background behind the outline of the young girl's face. The spoken and written words, 'you shouldn't' are central to the tension that has been created up until this point. One wonders what situation the girl with an upturned (submissive?) face is in. (I think, at first, of an abusive situation, because that has been a standard theme in contemporary women's poetry that deals with tense subjects.) An added intrigue is that the young face and the grown woman's voice in the narration do not match. The disconnection between the image of the young girl and the voice of the adult woman serves to further distinguish the tensions in the text, as seen through the separation or dissociation on the part of the speaker between the *now moment* of the text versus a reflection on an older memory. This is such a brief instant, but it lays a foundation that allows me to interpret the tension between the female speaker and the father as the overriding emotional weight of the text.

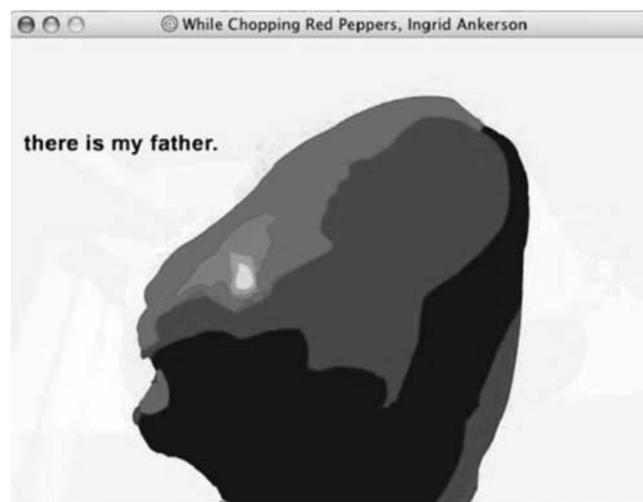
The rhythm has been consistent to this point. I recognized the meter of the written and spoken text to be variations on iambic pentameter,⁴ which also reinforces the lyric, sonnet-like quality. I have bolded the stressed syllables as an example:

*In the **space** | **between** | my **knife** | and my **fin**gertips
there **is** | my **fath**ler. You **sho**uldn't, he **says**, I **wants**
to **know**, I **cannot** | he just **show** | **me**[?] . . .*

In poetics, iambic pentameter has been referred to as the most 'natural' meter because it resembles the beating of the human heart. Visually, the red pepper on a white

FIGURE 2

The Silhouettes of Father (Bottom Half of Image, Facing Upward Toward Right) and Daughter (Right Half of Image, Facing Upward Toward Written Text) in the Red Pepper



background reinforces the heart metaphor. This metaphoric juxtaposition adds another layer of meaning to my reading of the tensions between father and daughter. For instance, if the space that is between the speaker's knife and her fingertips is filled with the red pepper, then there are two options for interpretation. The first option is that the text's words signify the red pepper is her father, and therefore she is methodically cutting up (cutting down?) her father. But the second option confuses, or at least changes, that possibility: The pepper is a heart (whether it is hers or her father's is unclear). So, she is either cutting her own heart (representing the pain that the relationship with her father creates) or she is cutting (off?) her father's heart to try to end the painful relationship. The multiple possibilities can work together in this text to create an overwhelming feeling of strong/'heartfelt' pain for the speaker, and, thus, for me as a reader who lives/reads vicariously through the speaker in the lyric text.

In the next scene, the use of narration becomes especially important. The speaker says, 'he says/ wants to know, cannot he just show me[?].' I put the question mark in brackets because it is not in the written text, but the narration implies it is a question asked by the father. This question, combined with the slumping figure of what I assumed was the young woman/speaker (see Figure 3), increases the tension while leaving me with an ambiguous idea of what caused the tension in the relationship. My first inclination was that the girl suffered from some kind of abuse. The aural emphasis on the father's wording of wanting to 'show' the girl suggests that the abuse could have been sexual. (More likely, however, the abuse is emotional.) The rhythm of the piece also changes from the steadiness of the first strophe, to a more choppy rhythm. The monosyllables create an abrupt feeling that is enhanced by the breath that occurs at the end of each phrase: 'he says [breath]/ wants to know [breath], cannot he just show me [breath].'

As the lines disappear, the following text replaces it: 'not . . . so . . . small,' which becomes the only element on screen. The ellipses, while not actually visible in the text, represent the amount of time between each word, visually and spatially, as each appears

FIGURE 3

The Slouched Graphic of the Young Woman Shows her Resignation or Despair



on screen. The rhythm of the piece slows considerably with these pauses, causing readers to wait and wonder what will happen. The next lines provide a motive for the father's actions: 'taking the knife/ followed by the sounds of/ thick red peppers on the cutting board.' The father's knowledge of food preparation becomes evident, and he seems to be meddling in his daughter's cooking as he takes the knife away from her to show her how to 'properly' cut the peppers. The combination of these elements suggests that the father's interruption into his daughter's cooking and life poses yet another domineering, family moment.

The next scene starts with the line 'my sigh against the stove' accompanied by a graphic representation of the young woman leaning against a stove. This image is followed by the words of her father, spoken through her voiceover, 'Like this'. The segment ends with only those words on screen. The dead-pan tone in the written and oral elements accompanied by the image of the slouching young woman signals that the speaker believes nothing she could do would ever be good enough for her father. As the father (through the speaker) says, 'Like this', I imagine him demonstrating how to chop the peppers while the girl feels the burden of living up to his standards in cooking and, no doubt, other areas of her life. The next element – a voiceover saying 'he teaches presentation/ perfect arrangement on a plate' – is heard while a graphic of a palette with vegetable pieces spins onto screen. The father's knowledge of food presentation is shown through the metaphor of the artist's palette, a visual that also works to show the daughter's overwhelming sense (spinning out-of-control . . .) that her father is trying to manage her life.

Yet, it is not just food preparation about which the father knows. According to the written and spoken text, the father taught the daughter, 'how to shake hands after church, firm like this'. Accompanying these words is the movement of two silhouetted people shaking hands (men, as evidenced by their coats and hats; see Figure 4). The

FIGURE 4

The Red Church Men are Superimposed Over the Grey Church Men, Visually Signaling Unease through Motion, Color, and Size



swirling motion of the red silhouettes as they rotate counterclockwise contrasts with the visual copies of the same men, but in grey, moving from left to right. In other words, these male figures are moving in opposition to each other, which produces a feeling of uneasiness (if not queasiness) and reinforces the growing tension in this text. In addition, devilish associations are made possible through the larger-than-life characters' red hue in relation to the mention of 'church' (i.e., a metaphor for Hell). These elements make me disinclined to suggest that the tension between the father and daughter is sexual. Rather, it seems, the father is simply too overbearing, and the daughter cannot handle his interference anymore.

The tension created by the swirling church-goers gives way to the figure of the woman, which grows larger while a puppeteer's crossbar enters with the written and spoken text, 'making my hand fit in his,/ like a puppet'. The screen turns black as the rest of the text is read – 'the way vegetables are silent under water'. This text, however, is not seen onscreen; rather, the image of a pepper being washed by someone's hands fills the void. I connected the simile of the speaker being taught to shake hands to her being a puppet of the father, and since she is controlled by him, like the silent vegetables, she is unable to speak for herself. The silent vegetables juxtaposed with the daughter's hand in the father's could also represent his smothering/drowning her so she could not live her life the way she might want.

The palette animation returns in the next scene with a broccoli floret tweening into the woman's silhouette. Accompanying that animation are the following spoken and written words: 'I'll learn to present myself'. So, the young woman must learn 'to present' herself according to the father's wishes. Throughout the text, as in this scene, the figure of the woman remains hunched, as if she cannot ameliorate her situation so long as the father is there. Finally, the text ends with the words 'a firm handshake/ a straight back' next to the hunched figure, which quickly fades from screen. She is replaced by a pepper being sliced on a cutting board. The background fades to black as the final words are spoken: 'I'll chop my peppers thick, for my father/ from whose kitchen I'll later move/ a thousand physical miles from [sic].' As these lines are read, the cutting board with the peppers and knife move toward the front of the text's frame, disappearing from view at the bottom of the screen so all that remains is black. The imagery of this ending suggests that the young woman removed herself ('a thousand physical miles') from the father to get away from the tension and the stress of living under his watchful eye. Her desire for removal is visually signaled by the peppers' movement out of sight. Thus, as a whole, 'While Chopping Red Peppers' communicates a daughter's anxiety over and eventual disconnection from her father's unwanted interruptions. I arrived at this reading by generatively interpreting the text in readerly ways – ways that connected nearly all of the multimodal elements in this text to a single, rhetorical purpose – in a meaning-making process that current rubrics do not yet promote.

Readerly + Designerly = A Writing Studies Approach

I call 'While Chopping Red Peppers' a text rather than a poem because, unlike Kress's (2003) recent arguments that multimodal texts can be identified according to their prominent genre, 'Red Peppers' uses many genres (e.g., poem, voiceover, cinema, animation, etc.), all to equal meaning-making effect. Each of these genres is fulfilled by

including specific modal elements, and it is important to consider all these possible generic elements when interpreting a new media text. (In that respect, Kress and van Leeuwen's insistence on considering all modes of communication were appropriate; they just didn't show how those modes might be interpreted in readerly ways.) In 'Red Peppers', the designers used the central, thematic element of the red pepper in multiple modal contexts as a metaphor for the control the speaker's father had over her. The text is filled with multimodal elements that reflect the on-going tension in their relationship. If we use the five modes that the New London Group suggested were possible in a multimodal text, some of the elements I have mentioned above that display a tension in 'Red Peppers' would include the modes and elements in Table 1.

While I can categorize these elements according to their modes of communication, the modes themselves do not necessarily help me to make meaning in readerly ways (listed in the third column) from the elements. I made meaning by applying my knowledge of reading and hearing poetry to reading the written text and visual elements and hearing the audio (and later going back and looking at how elements worked in modes I was less familiar with analyzing, like gestural and spatial). What Table 1 does not show is how these elements interact with other modal elements to compound the tension – the purpose – of the poem. For instance, labeling the churchgoers' change in size and rotation as a spatial quality of a multimodal text does not cause me to interpret that transformation as a metaphor for the speaker feeling like she is under pressure to live a

TABLE 1

Elements in 'Red Peppers' Categorized by the NLG's Five Modes of Communication

Mode	Element	Meaning
Linguistic	the spoken line 'the way vegetables are silent under water'	Spoken text is multimodal (linguistic and audio), but is significant here because this line is one of the few in the text that never appears in writing. Its absence is metaphoric for the silence the daughter must endure under her father's emotional control.
Visual	the red pepper that contains the silhouetted faces of the speaker as a young girl and the father as an old man	The overlapping silhouettes visually reflect the power struggle of the father and daughter and the subsequent tension.
Audio	the voiceover	There is a dis/connect between the speaker's vocal qualities (as a young-adult female) and the graphic representations of the age of the girl.
Spatial	the churchgoers' (i.e., men in hats) change in size and rotation	The motion and space they display on screen shows uneasiness.
Gestural	the hunched silhouette of the daughter	The repeated figure of the girl reflects her submission.

life acceptable to her father (which seems to include going to church in addition to cutting her peppers an appropriate width). That meaning comes from mentally juxtaposing all of the elements in that scene, as I did in my reading above, as well as making connections between that scene and those that surround it. (This is Iser's [1978] *Act of Reading* in action across multiple media!)

As I said before, my reading wasn't intended to show how to help readers new to new media make meaning from a text; its function was to provide a readerly interpretation to compare to the designerly ones that the rubrics of Manovich and Kress and van Leeuwen provided. For instance, the reading that used Kress and van Leeuwen's four strata showed readers what process a designer might need to go through to compose a multimodal text – that is, that the designers of 'Red Peppers' needed to consider:

- (discourse) how to incorporate cultural and social contexts of familial relationships, cooking, religion, and poetics into the text;
- (design) which semiotic elements to use to represent the above discourses across multiple modes;
- (production) in which software program to compose the text and, subsequently, how to use FLASH, specifically, to further the purpose of the discourses and design; and
- (distribution) how to get the text to potential readers (via FLASH PLAYER).

Kress and van Leeuwen's model allows readers to break down the process of design and to consider how larger issues like discourses can be used to produce multimodal texts. Although, we do not see how or why these decision processes occur using the strata. How, for instance, did the designers choose which discourses to address when they wrote the poem on which this text was created? Or, why did they choose a slicing motion for the opening-scene knife rather than no motion at all? Kress and van Leeuwen's rubric is not intended to help readers determine rhetorical outcomes that such choices create.

It is a similar story with Manovich's five principles, as the reading using those terms showed. What readers would walk away with by using Manovich's units of analysis for a new media text would have them wondering why it matters, for instance, that

- (numerical representation) 'Red Peppers' is digital;
- (modularity) its elements can be edited;
- (automation) the tweening process in FLASH is transparent to the designer;
- (variability) the elements can be exported to and used in a different text; and
- (transcoding) the exported file-extension conventions are being followed.

These principles are initially important to readers only because if the text were not digital and then transcoded as a playable file, it would not be readable, and the point of interpretation would be moot. For readers who are more familiar with new media texts, questioning a text using this rubric might be interesting in that it would uncover some (again, technological) features that the reader might have overlooked (see, e.g., Sorapure, 2003), just as, for instance, a reading of 'Red Peppers' using the framework of lyric poetry may be inadequate for some writing teachers. But neither Manovich's five principles nor Kress and van Leeuwen's four strata offer support to readers who struggle

with interpreting a new media text in relation to that text's purpose – a kind of text with its own reading process that most readers, especially in writing studies, are unaccustomed to having to interpret.

In the last few years, as writing studies has seen more scholarship in its own field that resembles new media texts (see, e.g., Anderson, 2003; Ball and Rice, 2006; Miles, 2003; Ross, 2003; Sorapure, 2006; Walker, 2006; Wysocki, 2002), the need for readerly strategies has become evident. I have discussed here some options for readerly strategies (mostly based on aesthetic and rhetorical models), and other scholars have posited theirs.⁵ But I return to my generative, multi-angled reading above to conclude with two points: (a) for writing teachers, connecting the meaning of multiple modes in a new media text to its purpose is a crucial step in interpretation (and is not a step that other rubrics necessarily do), and (b) writing teachers have always, when embracing new theories such as new media, approached them from what they know and what they do not know and have learned to reconcile those connections and differences to find a more useful theory. New media simply gives writing studies another area in which to learn and to expand its critical understanding of texts in readerly and designerly ways.

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Notes

- 1 In 2005, I helped conduct a national survey of writing instructors who teach analysis and composition of multimodal and new media texts in their classes. (The terms multimodal and new media are, for the most part, used interchangeably in this field.) A majority responded that the New London Group (Cope and Kalantzis, 2000), Kress (generally), and Manovich's (2001) *Language of New Media* were in their top five theoretical influences. Of those who listed Kress, most cited his book with Theo van Leeuwen, *Multimodal Discourse* (2001). Thus, I focus here on those three books. The other two books/scholars cited – Wysocki et al.'s *Writing New Media* (2004) and Kress's *Literacy in a New Media Age* (2003) – do not provide rubrics like the older books do, or at least none that have made their way into composition scholarship yet.
- 2 Of course, in some respects, the medium of the book prevented them from including examples that extended beyond these less-complicated texts, but the boundaries of their own distribution medium didn't mean they needed to preclude mentioning or analyzing other modal examples.
- 3 I should point out that this mismatch of intentions is an issue of audience – a disconnect between Manovich's probable intended audience (communication theorists interested in the historical connection of new media technologies and cinema) and the adopted audience of writing studies scholars who have extrapolated the rubric as a way to implement new media production and consumption in their classes when there is a lack of better-suited scholarship for their needs. It is that disconnect that I am trying to point out in this article – writing teachers need their own theories, in addition to Kress and van Leeuwen's and Manovich's, in order to teach readerly/rhetorical ways of approaching new media texts.
- 4 The majority of the poetic feet (9 in total) in these lines can be scanned as iambs and headless iambs, although there are anapestic variations (5 total) as is typical in contemporary lyrics that use iambic pentameter, such as sonnets.
- 5 Wysocki (2001), writing one of the first scholarly texts relating to new media in composition studies, showed how rhetorical analysis can be used in interactive, digital, multimodal texts. Later, Sorapure (2006) used literary tropes of metaphor and metonymy to assess multimodal meaning-making in professional and student-produced new media texts.

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