Open Research Online

Citation

Fransman, Jude (2012). Assembling Texts in the Digital University. International Journal of Learning and Media, 4(3-4) pp. 53–58.

URL

https://oro.open.ac.uk/46201/

License

Policy

Versions

Assembling Texts in the Digital University

IJLM

Jude Fransman
Institute of Education, University of London
J.Fransman@ioe.ac.uk

Visit IJLM.net

Introduction

Recent years have witnessed a proliferation of research into digital practices in the university. Terms such as *digital literacy* (Buckingham 2010) and *digital scholarship* (Weller 2011) have become common currency, and funding for research into these phenomena, at least in the United Kingdom, has escalated.[1] While significant advances have been made in understanding new literacies and digital practices, with fluid identities replacing fixed identities,[2] social practices replacing skills (Lea 2007; Lankshear and Knobel 2008; Goodfellow 2011), and communities replacing networks (Barton and Tusting 2005; Haythornthwaite and Kendal 2010), a tendency nevertheless remains for research to reify "the digital" and neglect the material dimension of text-making. Where attention to materiality is given (for instance in studies that draw on human–computer interaction and activity theory), a clear dichotomy tends to be drawn between the social and material components of interaction with "the material" playing a subordinate role to "the social."[3]

In this article I draw on social semiotics and the material philosophy of Gilles Deleuze to propose a model for understanding the mechanics of academic text-making which attempts to challenge these dichotomies. While not limited to the analysis of *digital* texts, the model might be used to explore how the modal make-up of texts afforded by digital media can challenge and help to redesign traditional academic genres. To illustrate the model, I use the example of an academic journal article (though the analysis could equally apply to other academic texts such as a conference presentation, student essay, or dissertation). I conclude by considering how journals such as *IJLM* are reimagining the social and material boundaries

of academic texts by embracing the potential of new media.

Virtual-Actual Texts

How are different types of text assembled by academics in the university? And what is the influence of the social *idea* of academic texts and the "conditions of possibility" set by their material *actualization* on this assembling process?[4] Philosophers such as Deleuze have referred to any instance through which social-material matter (e.g., representations of data, theoretical concepts, references) is fixed (into forms such as a journal article) as *virtual-actual becoming*. In some of his earlier work, Deleuze (1966, 1994) argues against Plato's transcendent assumption that life does not rest on an ideal or original model but instead that all social and physical matter exists on a plane of *difference* and the boundary-setting through which social or material *identities* are defined occurs through discursive practices that act as copying devices. In this way the real is always *actual-virtual* (Deleuze 1994). An actual thing is produced only from virtual possibilities. Some general image of a journal article must already exist in order to build, recognize, and perceive an actual article. What something *is* (actually) is also its power to *become* (virtually). Virtual potentialities are recognized only once they have been actualized, and an actual thing has also a virtual dimension: a journal article is not just a text but also an expectation of (among other things) peer review and publication. But the text may go on to become something else as well—a citation in another text, for example, or a listing on a search engine. So while academic standards might result in some measure of what constitutes a particular academic text, evolution and deviation are always occurring—whether on an individual, institutional, or societal level. What then are the mechanics of assembling texts, and how might an understanding of such mechanics contribute to interventions in academic literacy?

Interest, Semiotic Resources, and Affordances

According to a social semiotic perspective (Halliday and Hasan 1985; Hodge and Kress 1988; Kress and van Leeuwen 1996; van Leeuwen 2005; Kress 2010), any text might be understood as *a momentary fixing and framing of semiosis* guided by the *interest*[5] of the text-maker—in the case of the journal article, the academic researcher—and the array of *semiotic resources*[6]

at her or his disposal. To understand the social and material conditions of possibility of meaning-making, social semiotics offers the reformulated concept of *affordance*.[7] All instances of communication involve the use of *modes* (such as speech, writing, gaze, gesture). According to van Leeuwen (2005), these modes have a *theoretical* semiotic potential (constituted by all their past uses) and an *actual* semiotic potential (constituted by those past uses that are known to and considered relevant by the users of the mode and by potential uses that might be uncovered by the users according to their specific needs and interests). Since all instances of communication take place in a social context, different contexts may have different rules or best practices that regulate the ways in which specific semiotic resources can be used—or, alternatively, leave the users relatively free in their use of the resource (van Leeuwen 2005). So *affordance* in this context is shaped by the different ways in which a mode has been used, what it has been repeatedly used to mean and do, and the social conventions and material possibilities that inform its use in context. In this way the affordance of a mode is related both to materiality and social meaning.

Distinguishing between the notion of *affordance* and Halliday's similar notion of *meaning potential*, van Leeuwen argues that while the latter notion focuses on meanings that have already been introduced into society, "affordance" also includes meanings that have not yet been recognized: "no one can claim to know all the affordances of a given [mode or semiotic resource] yet as semioticians we do not need to restrict ourselves to what is, we can also set out to investigate what *could be*" (van Leeuwen 2005, p. 5; emphasis in original). This distinction resonates with Deleuze's notion of *virtual-actual becoming*. However, van Leeuwen reminds us that the fact that resources have no objectively fixed meanings does not mean that meaning is a free-for-all: "In social life people constantly try to fix and control the use of semiotic resources—and to justify the rules they make up—although more so in some domains than others" (van Leeuwen 2005, p. 5). The question is, how are these conditions of possibility set in various academic domains (e.g., that of "publication"), and how might the affordances of a text be navigated by those academics in designing and producing texts? As a response, social semiotics provides a set of tools for unpacking textual affordance in two key ways: first, by showing how the affordances of a text interact with the process through which texts

are assembled; and second, by showing how the affordances of a text interact with its content and form.

With regards to the first set of tools, social semioticians have suggested that texts are assembled through the somewhat sequential stages of rhetorical process, design, and production (see Kress 2010). *Rhetorical processes* occur before (though are also concurrent with and can conceivably follow) the moment of design (when a text is fixed and framed). In these processes the sign maker "makes an assessment of all aspects of the communicational situation: of her or his interest; of the characteristics of the audience; the semiotic requirements of the issue at stake and the resources at stake and the resources available for making an apt representation; together with establishing the best means for its dissemination" (Kress 2010, p. 126). In other words, this stage involves an assessment of the virtual and actual affordances of the text to be designed. So in preparing articles for submission to academic journals, authors will asses the theoretical, methodological, empirical, and ideological messages they want to convey (negotiating between their own personal and professional interests and what they imagine will be the interests of journal editors and reviewers); the integrity of their data and how best to represent it; and the form of the text into which their messages will be packaged (or the "conditions of possibility" afforded by the journal). The rhetor's task is therefore a political one; namely, "to provoke and produce the rearrangement of social relations by semiotic means" (Kress 2010, p. 121). In contrast, the *design stage* involves the transformation of "political intent into semiotic form" (Kress 2010, p. 121). So in this stage the author will begin to navigate the virtual affordances of the materiality of the journal (considering issues such as word limit, formatting, and style and whether digital elements such as hyperlinks or embedded video are facilitated); and the virtual affordances of the social form of the journal (considering issues such as generic conventions of "the academic article" as well as those specific to the journal itself and the context of the article if included in a special issue, for example). Finally, the *production stage* constitutes the stage in which the virtual is actualized (the article is [re]drafted until the appropriate structure, style, length, and format are met and a final draft is submitted).

To explain the influence of the affordances of a text on its content and form, semioticians such as Kress propose the concept of "fixing," which involves choices about *mode* and of *genre*.[8] According to social semiotic theory, texts are the products of communicative interaction and are multimodal (Kress and van Leeuwen 1996). This means that there is always a choice of *modes* (or semiotic resources) through which to fix meaning: "Depending on the media involved there are different possibilities: do you wish to realize meaning as image or as gesture, as moving image or as speech or as ensembles of these?" (Kress in Jewitt 2009, p. 64). Kress shows that the choice of mode or multimodal ensemble in which the text is realized and the *generic* form that the text takes (such as "journal article" or, more specifically, "missive," "findings," "think-piece," "review," etc.) matters. "Once particular means of 'fixing meaning' have become habituated . . . it is likely that the world as represented through the affordances of mode and genre will come to seem like this 'naturally'" (Kress 2009, p. 66). So *genre* addresses the semiotic *emergence* of social organization, practices, and interactions; it names and "realizes" knowledge of the world as social action and interaction and occurs through participation in events (such as "publication") formed of such actions experienced as recognizable practices (such as submitting an article and undergoing peer review).

Together the interrelated concepts of *genre* and *mode* can help show how meaning is fixed. *Genre* answers the question, "Who is involved as participants in this world and in what ways, and what are the relations between participants in this world?" and so fixes meaning socially (e.g., as a journal submission where participants are ascribed roles such as "author," "reviewer, and "editor"). *Mode* answers the question, "How is the world best represented, and how do I aptly represent the things I want to represent in this environment?" and so fixes meaning materially and ontologically (e.g., as a "figure" in an article or through typeface and layout as set out in "house style") (Kress 2010).

The notions of "interest," "semiotic resource," and virtual-actual, generic-modal "affordance" help to explain the assembling of both digital and nondigital academic texts—with implications for understandings of new academic literacies. This relationship is visualized in figure 1.

In the example of the journal article, the rhetorical and design phases are driven both by the interests of the academic researcher and the semiotic resources at her or his disposal. Interests might include representing the frameworks and findings of a research
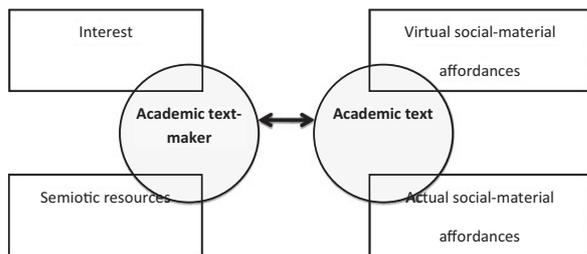
Fig. 1 The mechanics of assembling academic texts.

project; converting a conference paper into a publication; voicing opinion or broadcasting an ideological message; improving career prospects by authoring a world-class publication in a leading journal; or positioning oneself as part of a broader network (if writing as part of a special issue). Semiotic resources tend to include written language (typed and formatted), competence with word-processing packages, and representation of data in the form of graphs, tables, figures, photographs, drawings, and so on. Authors might also be required to recontextualize or translate data and ideas from a previous text (such as a dissertation or PowerPoint presentation) into an original article (see Fransman 2012).

But the processes of assembling a journal article is also influenced by the text itself: the conditions of possibility set by its virtual affordances (the idea of what a "journal article" is and what this specific article could be) and its actual affordances (the influence of social-material possibilities and constraints on the actualization of the article). Examples of these are summarized in table 1.

The symbiotic relationship between (1) the academic researcher (with her or his personal, professional, and political interests, as well as broader institutional pressures) and the semiotic resources at her or his disposal; and (2) the academic text (both as a virtual idea and an actualized artifact) blurs the dichotomization of the social and material and enables any act of academic text-making to be explored in terms of both its social and material influences and, crucially, the interrelationship between them.

Concluding Thoughts

So what then is the influence of new digital resources on academic literacies and the experience of assembling texts? As the model presented in this article shows, all texts—whether digital or nondigital—are subject to the same processes of assemblage. However, the conditions of possibility set by the social-material affordances of academic texts might be redefined in order to embrace the potential of new digital resources. The "Knowing and Doing" article type facilitated by the *IJLM* is a case in point. Encouraging contributors to make use of online platforms that support the use of photographs, video, and graphics or to experiment with the Web's interactive potential, the journal also helps to reimagine the traditional genre of the academic article by casting video, graphic, or photo essays as acceptable formats for submission. Such advances carry with them significant implications for the types of semiotic resources required to take full advantage of these new textual forms. At the same time they allow authors to conceive texts as (for

Table 1   The conditions of possibility of the "journal" article text

	Virtual Affordances	Actual Affordances
Genre (social)	• Previous experiences with academic articles (structure, length, style, etc.) • Previous experiences with different *types* of article (e.g., editorial, think-piece, findings, review) • Positioning within the journal (e.g., as part of a special issue) • Expectations of reviewers, editors, and readers	• Response to the themes and conventions of a specific journal • Adaptation according to "house style" • Adaptation according to word limits • Response to other articles in a "special issue" • Response to reviewers' comments • Editors' amendments
Mode (material)	• Previous experiences with materiality of academic articles (e.g., layout, language, formatting of images/graphics) and the function of different modes (e.g., written text as explanatory and graphics as illustrative) • Idea of the article as either appearing in a printed journal or virtually, online	• Response to specific material conventions of the journal (e.g., layout, language, formatting of images/graphics) • Representational possibilities of media (printed journal, electronic document with or without embedded video, hyperlinks, etc.)

instance) dynamic or nonlinear or interactive with the potential to subvert the relationship between author and reader and to democratize knowledge production. In-depth analyses of the assemblage of these new academic texts is needed to illuminate the potential of the digital in this regard. However, these "new" types of texts also have implications for academic practice—implications that have not been fully considered. For example, lack of control over data as it moves out of regulated spaces can have significant ethical implications, and the newness of these publishing practices means that standards for ensuring quality common to offline journals have not been developed to the same extent. Digital resources are, however, subject to similar institutional framings as more traditional texts, whether these relate to universities, publishers, libraries, different providers of media and digital infrastructure, and so on. The structures, processes, and knowledge hierarchies embedded in each institution are infused with specific agendas, and further research is needed to unpack how these play out as texts engage increasingly with domains outside academia.

Notes

1. Jisc, for example, has supported a number of initiatives in digital scholarship under its "e-research theme" (see http://www.jisc.ac.uk/whatwedo/topics/researchinnovation.aspx), while the British Library has developed a digital scholarship strategy (see http://bufvc.ac.uk/2011/04/05/british-library-digital-scholarship-survey).
2. See, for example, White's recent adaptation of Prensky's (2001) "natives" and "immigrants" into "residents" and "visitors" (White 2011).
3. An exception is actor-network theory where the agentive properties of both social and material "actors" are given equal weighting (see Latour and Woolgar 1979; Law 2004; Savage et al. 2010).
4. Latour and Woolgar (1979), Mol (2003), and Law (2004) all adopt the notion of "conditions of possibility" from Michel Foucault (see, e.g., Foucault 1970, 1972), who argued that the apparatuses of scientific production set limits to what is possible. In his earlier work Foucault (1970) argued that these limits (as well as the social practices that set them) are established by historical *epistemes*. Later on he altered his position (see, e.g., Foucault 1972), insisting that the potential for variation and creative innovation within these limits is endless (Rose 1999). The notion of "conditions of possibility" as used by Latour and Woolgar, Mol, and Law differs slightly from Foucault's use in that it is drawn on a more modest scale suggesting that "the limits to scientific knowledge and reality are set by *particular and*

specific sets of inscription devices" (Law 2004, p. 35; emphasis in original) rather than by larger epistemes and is therefore probably closer to Foucault's later notion (Foucault 1980) of the *dispotif* (see Savage et al. 2010), which includes an array of material, human, and behavioral elements and so extends beyond the discursive reach of the episteme.
5. In social semiotics, the notion of the *arbitrary* sign developed by Ferdinand de Saussure is replaced with the *motivated* sign in the design of "semiotic resources both to produce communicative artefacts and events and to interpret them (another form of semiotic production) in the context of specific social situations and practices" (van Leeuwen 2005, p. xi).
6. Including language but also extending to other communicative tools such as gaze, gesture, illustration.
7. Jewitt explains that the use of the term by social semioticians evolved from work on cognitive perception by Gibson (1977) and design by Norman (1988). (See Jewitt 2009, though she argues that neither Gibson's nor Norman's notion of affordance adequately acknowledges how tools—that is, conceptual and material objects—are shaped by people's use of them in specific social situations; see also Jewitt 2008.)
8. Kress (2010) also considers the role of *discourse* that has less to do with the form of the text and more with the content.

References

Barton, D., and K. Tusting, eds. 2005. *Beyond communities of practice: Language, power and social context.* Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9780511610554.

Buckingham, D. 2010. Defining digital literacy: What young people need to know about digital media. In *Medienbildung in neuen Kulturräumen: Die deutschsprachige und britische Diskussion*, ed. B. Bachmair, 59–71. Wiesbaden: VS Verlag für Sozialwissenschaften. doi:10.1007/978-3-531-92133-4_4.

Deleuze, G. 1966. *Le bergsonisme.* Paris: PUF.

Deleuze, G. 1994. *Difference and repetition.* Trans. P. Patton. New York: Columbia University Press. Originally published as *Différence et répétition.* Paris: PUF, 1968.

Foucault, M. 1970. *The order of things.* New York: Pantheon.

Foucault, M. 1972. *The archaeology of knowledge.* New York: Pantheon.

Foucault, M. 1980. *Power/knowledge.* New York: Pantheon.

Fransman, J. 2012. Re-imagining the conditions of possibility of a PhD thesis. In *The Sage Handbook of digital dissertations and theses*, ed. R. Andrews, E. Borg, S. Boyd Davis, M. Domingo, and J. England, 138–57. London: Sage.

Gibson, J. J. 1977. The theory of affordances. In *Perceiving, acting and knowing*, ed. R. Shaw and J. Bransford, 67–82. Hillsdale, NJ: Erlbaum.

Goodfellow, R. 2011. Literacy, literacies and the digital in higher education. *Teaching in Higher Education* 16 (1):131–44. doi:10.1080/13562517.2011.544125.

Halliday, M. A. K., and R. Hasan. 1985. *Language, context and text: Aspects of language in a social-semiotic perspective*. Oxford, UK: Oxford University Press.

Haythornthwaite, C., and L. Kendal. 2010. Internet and community. *American Behavioral Scientist* 53 (8):1083–94. doi:10.1177/0002764209356242.

Hodge, R., and G. Kress. 1988. *Social semiotics*. London: Polity Press.

Jewitt, C. 2008. Technology, literacy and learning: A multimodal approach. In *Handbook of educational psychology*, ed. J. Kleine, K. Littleton, C. Wood, and C. Staarman. London: Elsevier.

Jewitt, C., ed. 2009. *The Routledge handbook of multimodal analysis*. London: Routledge.

Kress, G. 2009. Mode. In *The Routledge handbook of multimodal analysis*, ed. C. Jewitt. London: Routledge.

Kress, G. 2010. *Multimodality: A social semiotic approach to contemporary communication*. London: Routledge.

Kress, G., and T. van Leeuwen. 1996. *Reading images: The grammar of visual design*. London: Routledge.

Lankshear, C., and N. Knobel, eds. 2008. *Digital literacies: Concepts, policies and practices*. New York: Peter Lang.

Latour, B., and S. Woolgar. 1979. *Laboratory life: The social construction of scientific facts*. London: Sage.

Law, J. 2004. *After method: Mess in social science research*. London: Routledge.

Lea, M. R. 2007. Emerging literacies in online learning. *Journal of Applied Linguistics* 4 (1):79–100.

Mol, A. 2003. *The body multiple: Ontology in medical practice*. Durham, NC: Duke University Press.

Norman, D. 1988. *The psychology of everyday things*. New York: Basic Books.

Prensky, M. 2001. Digital natives, digital immigrants. *NCB University Press* 9 (5):1–6.

Rose, N. 1999. *Powers of freedom: Reframing political thought*. Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9780511488856.

Savage, M., E. Ruppert, and J. Law. 2010. Digital devices: Nine theses. CRESC Working Paper 86, Centre for Research on Socio-Cultural Change, Manchester, UK. http://www.cresc.ac.uk/publications/digital-devices -nine-theses (accessed April 10, 2014).

van Leeuwen, T. 2005. *Introducing social semiotics*. London: Routledge.

Weller, M. 2011. *The digital scholar: How technology is transforming scholarly practice*. London: Bloomsbury Academic. doi:10.5040/9781849666275.

White, D. 2011. Not digital "natives" and "immigrants" but "visitors" and "residents." *English Language Teaching Global Blog*, June 14. http://oupeltglobalblog .com/2011/06/14/not-digital-natives-immigrants -but-visitors-residents/ (accessed June 24, 2011).