The Mechanics of new media (science) writing
Articulation, Design, Hospitality, and Electracy

Articulation Video Transcript (Nathaniel)

[0:05 sound of machine coming to life and whirring]

Nathaniel: [1:36] [intermittent train sounds throughout] Articulation has proven a productive notion in technical communication. Articulation is about joining things together and making them distinct. Slack, Miller, and Doak's (1993) now canonical treatment of the technical communicator as author uses articulation to demonstrate how technical communicators do more than simply transmit or translate information. By articulating information differently (or at all), the technical communicator participates in the production of knowledge. Slack, Miller, and Doak (1993) used the metaphor of the train to explicate articulation. They wrote, “Any specific train is thus a specific, particular set of articulations—an identifiable object with relatively clear cut boundaries” (Slack, Miller, & Doak, 1993, p. 169). With a train, each unique arrangement of the cars creates a distinct entity. And so too the technical communicator with information. Any articulation is a function of authorship, which involves choices about arrangement, style, media, and delivery.

Nathaniel: [2:39] By extension, if this model of articulation works for technical communication, then it ought to work for science writing as well. Piecing things together (and here we lean more than a little on Bruno Latour [1987]) is how scientific knowledge is made. He wrote:

By itself a given sentence is neither a fact nor a fiction: it is made so by others, later on. You make it more of a fact if you insert it as a closed, obvious, firm and packaged premise leading to some other less closed, less obvious, less firm and less united consequence.

(Latour, 1987, p. 25)

In this way, the science writer is doing the work of science, of scientists. Making this case requires a look at the interesting verb articulate. It can and has meant many things, all of them productive for this work in new media science writing. It can mean, alternately:

[3:30 music, “Door of Return” by Magnolia Summer]

- To come to terms of agreement;
- To express distinctly;
- To express or convey, especially through non-verbal means;
- To modify (vocal sound, a pulmonary airstream) so as to produce a speech sound, a word;
- To make visually distinct;
- To join or unite;
- To attach or unite by a joint;
- To unite or connect (bones) at a joint or by joints; specifically to reassemble (individual bones) to form a skeleton (Articulation, 2012).

Articulation is a robust concept with a complex and fully mineable etymology. This etymology points toward articulation’s continued usefulness in science writing and technical communication as they come to grips with the mechanics of new media production.

Nathaniel: [4:18] We here see that articulation refers not strictly to speech but to bodily and mechanical connections as well (think articulated buses and trains). This mechanical side of articulation we have found equally useful in a class not only about science writing but new media
science writing. Students in the course we describe are asked to articulate in the ways described by Slack, Miller, and Doak (1993), and also to articulate as a mechanical task: learning the microphones, the cameras, the cables, the data management, and the software necessary to piece together their segments. In articulation we thus find the one concept to unite them all. Articulation allows us to connect well-established notions of authorship in technical communication to emerging scholarship and trends in new media writing. In brief, articulation foregrounds the active role science writers play in the production of knowledge and it does so by highlighting the need for mechanical deftness with the means of that production, which in the context of this project is new media.

Katie: [5:24] We have thus found articulation particularly valuable for the pedagogical work we are introducing here in this video as a portal. We here reflect upon an upper-level undergraduate course in new media writing that focused exclusively on science writing. In small groups, students explored research underway at their home institution. Students in this class collaboratively researched, planned, and produced science writing using new media technologies. Students selected and investigated scientific research currently underway using both primary and secondary sources (things like interviews, observations, background research, and so on), and then planned, scripted, recorded, filmed, edited, and produced media such as a podcasts or video programs with this research topic as its subject matter.

Katie: [6:15] Ultimately, students themselves negotiated the focus and tone of their own publications. The course hoped to cultivate the habits of a successful professional communicator working in an increasingly collaborative, free form, and mediated work environment. Students also worked to develop an understanding of how rhetoric shapes science—both its practices and its public reception. It was additionally hoped that students would establish a voice as a writer, understand the principles and practices of primary and secondary research, gain comfort and competence with new media production and distribution, and develop sophisticated and critical responses to new media technology.

Katie: [6:57] This collaborative production is itself an experiment in the fullness of articulation: how does exploring, experimenting, and pushing the mechanics of scholarship change what and how we can argue and articulate? In what new ways can we foster the convergence of video and audio? How might collaboration change when a heterogeneity of voices can be maintained across a unified whole? Slack, Miller, and Doak (1993) wrote, “The process of communication is then not simply a transmission or a translation but an articulation of voices” (p. 172). That is why we now turn our project over, as it were, to several key voices in the field of new media writing and in the rhetoric of new media. Both threads lean heavily on mechanics, on the means of production, and on invention and the full rhetoric of articulation. New media science writing illuminates this mechanical work and the challenges and opportunities it presents for both invention and for intervention.

Jenny Rice: [8:03] “The following article makes the argument that embracing the role of technology’s mechanics is necessary for those of us who want to serve as rhetorical producers and teachers of production in the twenty-first century. Rather than shrinking back or separating our work from the materiality of production means, we have the opportunity to expand our own engagements with the modes of invention and means of circulation” (Rice, 2008, pp. 367-368).

Jenny: [8:34] “Yet, if we dismiss this technical work as rote mechanics, we risk calcifying a distinction between the production work of texts (including the operations of buttons, cords, and wires that cut and record texts) and the produced texts themselves” (Rice, 2008, pp. 367-368).

[8:40 music, piano composition by Katie]

Jenny: [8:51] “We might call this a pedagogy of writing mechanics insofar as it takes production as its primary goal” (Rice, 2008, p. 374).

Jenny: [8:75] “We are often disinclined to place our work in proximity to ‘mechanics.’ Nevertheless, it is important to see this reluctance as a historical reification within the discipline. As a corrective to this disinclination, I propose that we conceptualize rhetorical producers as logomechanics, or creators who can imagine, improvise, and enact the material deployments of meaning and its operation” (Rice, 2008, p. 372).

Jenny: [9:26] “Part of the production and circulation of meaning depends upon a rhetorician’s ability to imagine possibilities for those meanings’ deployment” (Rice, 2008, p. 373).

[9:34 sounds from train station]

Kate: [9:41] This treatment of imagining the possibilities within a consideration of mechanics echoes treatments of the rhetorical canon of invention in terms of new media.

[9:55 sounds from train station]

[10:10 music, “Door of Return”]

Collin Brooke: [10:11] “As actionary, a rhetoric of new media should prepare us for sorting through the strategies, practices, and tactics available to us and even for inventing new ones” (Brooke, 2009, p. 22).


Collin: [10:26] “A rhetoric of new media, rather than examining the choices that have already been made by writers, should prepare us as writers to make our own choices. Such a rhetoric cannot be achieved through the reactive lens of critical/theoretical reading” (Brooke, 2009, p. 15).

Collin: [10:40] “We should be concerned, however, [...] with the limitations that criticism entails, with its emphasis on evaluating work that has been done, rather than focusing on invention on what might still be done with new media” (Brooke, 2009, p. 10).

[10:55 sounds from train station]

Katie: [11:00] There are productive parallels between the critical mode Brooke (2009) took to task and traditional approaches to science literacy, which typically concerns our ability to critically consume scientific knowledge. Brooke’s (2009) unique focus on invention reinforces the productive authorship of scientific knowledge. As we will shortly turn to the Florida School of new media, it makes more than a little sense here to attend to what we might call science electracy, which, like Brooke’s (2009) actionary rhetoric, attends to the active role we might play in the production of
scientific knowledge, which articulation allows us to do. It comes as no surprise then that treatments of new media in rhetoric and composition attend to the ontological considerations of articulation. Articulation concerns not simply how we know but also who and how we are. Recall that the more biological and mechanical etymological roots concern not making things known but making them at all.

[12:00 sounds from train station]

**Jenny Bay:** [12:20] “If things gather and bring the world, then digital things afford a subtly different world, not just a different web of ideological meanings within the world” (Bay & Rickert, 2008, p. 226).

**Jenny and Thomas Rickert:** [12:31] Hi, I’m Jennifer Bay, and I’m Thomas Rickert. We’re authors of “New Media and the Fourfold” (Bay & Rickert, 2008).

**Jenny:** [12:36] "We argue that learning to dwell with new media and its technologies entails a harkening to their ontological weight and rhetorical agency” (Bay & Rickert, 2008, p. 213).

**Thomas:** [12:45] “The virtual, then, must have ontological bite; it simply manifests different ways of organizing matter, energy, place, and interrelation than what we are accustomed to call ‘reality’” (Bay & Rickert, 2008, p. 225).

**Thomas:** [12:52] “Rich forms of connection and interactivity are always replete with risk; indeed, such risk contributes to what makes connection worthwhile” (Bay & Rickert, 2008, p. 235).

[13:07 sounds from train station]

**Katie:** [13:17] Such rich forms of connection and interactivity are precisely what schools of thought such as the Florida School of new media not only explore but also strongly advocate. This thought helps us to push articulation, and the emphasis on continual re-articulation, into the realm of new media production. What unique forms of articulation are made possible by new media, which come with new methods? That is, how does the rhetorical agency of new media shape how we might articulate science writing?

[13:50 sounds from train station]

**Jeff Rice:** [14:05] "Stop thinking of media in terms of permanent and stable production [...] Find the content of your work in other work (online, in print, in film) as well as in various versions of any single composition (film, video, Web) you have produced” (Rice & O’Gorman, 2008, p. 14).

**Jeff:** [14:20] Hi, I’m Jeff Rice, co-editor of *New Media/New Methods: The Academic Turn from Literacy to Electracy* (Rice & O’Gorman, 2008).

**Jeff:** [14:28] "Worry less about being understood when you compose digitally and be more concerned with provocation, with evoking a 'What the ...' response in your readers so that they must devote attention and effort towards comprehending how you are working with identity, technology, and rhetoric at once” (Rice & O’Gorman, 2008, p. 17).

[14:42 sounds from train station]
Kate: [14:53] We have so far addressed the what and how of new media science writing, but not so much the when. And we here mean “when” in a rather specific way following DeVoss, Cushman, and Grabill’s (2005) “Infrastructure and Composing,” which develops and commends an infrastructural approach to writing in digital environments then navigates and negotiates “the institutional complexities that shape new media writing” (p. 14).

[15:00 music, “Door of Return”] [15:15 sounds from train station]

Nathaniel: [15:20] Here at the close of this video portal, it must be acknowledged that articulation, as a concept and as a theory, has not yet been fully deployed. This video has leaned largely on articulation’s epistemological functions. But articulation does more than attend to knowledge-making practices: it attends also to strategic, political work (Slack, 1996). That is not to say that such functions are absent in this project. Johndan Johnson-Eilola (1997) argued, “Articulation theory offers a practical approach to remaking borders. In this work, meanings are not given, boundaries are not fixed, but always multiple, open to connections in more than one way (often at the same time)” (p. 43). The remaking of borders is both epistemological and political. This course, which seeks to place students in the knowledge-making enterprise, is therefore necessarily political. As we see in Kate’s Electracy podcasts, the historical and hierarchical features of science writing are political inasmuch as such features police knowledge practices and expertise. Articulating the claim that science writers with training outside of science do science challenges such borders. Slack (1989) argued, “Power thus enables particular articulations, rendering them differentially effective as well as differentially resistant to attempts at rearticulation” (p. 334).

Nathaniel: [16:39] In the podcasts that follow (podcasts that populate the classroom we are now moving into), we pick-out several infrastructural threads implicitly woven through this course: institutional culture and context, epistemology, ideology, and pedagogy. Taking up instructional design, scientific literacy, and new media production, these podcasts articulate the infrastructure of new media science writing. Christopher’s Design podcast takes on infrastructure in ways that attend to ideology: how does the work of instructional design make new media production more or less likely, more or less accessible? Katie’s Hospitality podcast takes on hospitality as an ethic of teaching new media production so as to acknowledge the politics of both technology and pedagogy.

Nathaniel: [17:17] Meaghan Morris (1997) wrote, “Adroitly used, the concept of articulation allows us to bypass those paralyzing debates about relative status of different practices construed as though they were competing realities (the ‘discursive’ and the ‘non discursive’, for example), and to ask how these connect and interact in specific instances” (p. 148). The podcasts that follow push on the video’s deployment of articulation, demonstrating how the logomechanical work of articulation is likewise strategic and political. And the student productions here likewise work to rearticulate and thus bypass debates about the role of science writers in the production of knowledge.
References