

11 The Rise of Multimodality in Academic Publishing

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Since the mid-1990s, multiple journals have been experimenting with publishing digital, interactive multimedia as part of the scholarly record. This multimedia has taken several forms, across a spectrum of print-like to fully screen-based research, from a majority of alphabetic text and a few images to audio and video-based websites. Commercial publishers such as Elsevier and Sage have begun offering online appendices where authors can publish multimedia and data content supplemental to the print-like articles appearing in their closed-access journals. Other journals have been including multimedia in more radical ways, such as *Kairos*, *Vectors* and the *Journal of Artistic Research*.

Scholarly academic peer-reviewed and creative arts research journals and university presses have made a number of advances to include more robust multimedia content – what we refer to here as *webtexts*. Webtexts are multimedia-rich, digital, screen-based texts designed to enact an author's scholarly argument. Webtexts can be equivalent in intellectual scope to an article or a book, in which authors design their argument using linked webpages or database-driven platforms, animations, images, audio, video, programming languages and written text. The purpose of authoring a webtext is found in the communication potential and additional layers of meaning making that multiple media and networked writing afford (see Cope & Kalantzis, 2000; Norman, 1999).

Yet, these multiple modes are not quickly embraced in academic publishing, as witnessed by the short list of journals that publish multimedia content *as* argument. This is content that is realized in a mix of media types, such as video or animation. The sections below present frameworks for understanding multimodal academic publishing – a mix of written, spoken, visual and dynamic modes of communicating (Morrison, 2010) – through the aspects of scholarly, social and technical infrastructure. We have selected two key items – editing and web design – that impact publishing in a global context where English is predominant, and we use these parameters to analyze three leading, multimedia-rich

e-journals: (1) *Kairos*, the longest-running webtext journal, which has been publishing since 1996, primarily with USA-based authors; (2) the *Journal of Artistic Research*, which began publishing most recently in 2011 and is a European-based, international publication; and (3) *Audio-Visual Thinking: The Journal of Academic Videos*, also a European journal, which published between 2010 and 2014.

Frameworks for Understanding Multimodal Publishing

The framework for electronic publishing that we draw on comes out of rhetorical studies – specifically our work in digital rhetorics – as it aligns with academic literacies in the teaching of writing (including writing for publication). Digital rhetorics draws on 20 years of multiliteracies research (Cope & Kalantzis, 1999; Kress, 2010; Kress & Van Leeuwen, 2001) in which communication happens across multiple modes of meaning: linguistic, visual, aural, gestural and spatial. All texts have come to be understood as multimodal because they combine more than one mediational mode and draw on learners' social semiotic resources to make meaning (e.g. Morrison, 2010); however, published academic written texts have historically been 'verbal heavy' (Lillis, 2013: 42) a convention that this chapter seeks to problematize.

We draw on our experiences as editors (Doug, Cheryl) and as editorial board member (Andrew) of *Kairos: Rhetoric, Technology, and Pedagogy*. We share a combined 40 years of editorial experience with this independent journal. It is out of this professional expertise that we provide an analysis of exemplary journals that offer a range of scholarly possibilities for multimedia-based argumentation. It is also based on our long editorial experience that we recognize the need for better systems of publishing that can support webtexts and similar multimedia artifacts. Our goal in providing this analysis is to show how journals are working with and promoting scholarly multimedia as well as how more work needs to be done, infrastructurally, to support this work into the future.

The following analysis uses a framework of sustainable digital publishing established by the authors (Eyman & Ball, 2014, 2015). This framework is based on three types of infrastructure that webtext journals need in order to maintain their stability and function as archival locations of scholarly record – the *scholarly*, the *social* and the *technical*.

Scholarly infrastructure

The scholarly infrastructure of a journal resides with the disciplinary field(s) in which a journal publishes and whether the discipline values multimedia as a meaning-making method in its praxis. There are many humanistic disciplines that value certain kinds of text-based multimedia

(whether digital or not) in their scholarship and classroom practice: art, architecture, design, music, performance studies, rhetoric, linguistics, theater and so on. And there are many scientific disciplines that value embodied forms of multimedia, such as the gestural and spatial interactions required in laboratory experiments, fieldwork and construction, in fields ranging from biology and chemistry to engineering, computer science and others. The oddity of these disciplines is that while most, if not all, of them have outputs that require multimodal expressions (e.g. bridges, surgery, poems, plays, formulas, interactive websites, sculptures), very few of them value multimedia *as* scholarship, even in fields where readers might assume such outcomes are valued, such as in art and design. However, there is nascent research at the PhD level; but in fields that have a much longer research base, such as architecture and music, there are still no journals in these disciplines that allow for the publication of scholarly multimedia. Clearly, stronger social infrastructures are needed to achieve this change.

Social infrastructure

The social infrastructure of publishing, as outlined in Eyman and Ball (2015), includes peer review and collaborative writing most obviously, but also traditional relationships of mentoring between senior researchers and junior scholars and new forms of mentorship that value webtextual publishing (see Ball, 2013). As it is, academic publishing, as with news and film, has been transformed by the proliferation of digital technologies and the potential democratization of their use through changing technical and social practices of use. Listservs and comments sections can be run in real time, versions and archives can be tracked and traced and, through collaboration with technical and visual experts, otherwise writerly academics can expand their work across a range of media. Scholarly publishing needs to use the social and cultural capital of its own professionals to reconfigure its digital literacies rhetorically (Eyman, 2015) – and not only via assertions that it is our students alone that need to develop and exercise their electronic literacies. Such an argument necessarily depends on solid and continuing engagement with technical infrastructures.

Technical infrastructure

Technical infrastructures are systems that support the perpetuity of scholarly and social infrastructures and texts that a journal (or press) publishes. Such systems require attention to the architecture and design of publishing venues so that publication of scholarly artifacts can be authored and produced and made accessible, usable and sustainable. Without basic attendance to Web guidelines espoused by the World Wide Web Consortium (W3C), for instance, running an online journal would be impossible to sustain.

Most webtextual journals use a non-standard editorial content management system (CMS) such as Drupal or Wordpress, but those CMSes don't include built-in editorial features (e.g. peer review or copyediting workflows). The absence of usable technical infrastructures has prohibited the proliferation of successful webtextual journals – a problem we aim to correct and which we address in the conclusion of this chapter. And those who don't have the technical infrastructure are facing more and more problems. For example, over the last two years (as of this writing in 2016), at least three popular webtext journals have initiated publishing hiatuses due, in large part, to shortcomings in their technological infrastructures.¹

As growing, interdisciplinary fields such as the digital humanities have discovered, it is not for lack of interest that scholars want to work with multimedia to make research products; it is that the disciplines themselves don't yet offer publication venues to support peer review and preservation of such multimedia scholarship. We argue that the lack of technical infrastructure – as well as rapidly changing scholarly and social infrastructures that are only recently interested in non-linguistic meaning making – have kept webtext publishing at bay. As the technical options change, we argue that scholarly and social desires can better reach fruition. In the following section, we highlight three journals that have made disciplinary inroads to multimedia publishing and offer a picture of how multimedia content is thriving within them.

Applying the Framework

In 2008, the Council of Editors of Learned Journals (CELJ) – an organization of several hundred journal and press editors – proposed guidelines for electronic journal editors that intentionally took into account multimedia-rich content. The guidelines promoted e-journals, offering criteria that editors should adhere to when setting up an online journal. The guidelines were 'intended to support editors of new and existing online journals in their efforts to produce publications whose value to the academy and to broader intellectual and artistic communities will be recognized' (CELJ, 2008, n.p.). Many of the concerns are useful for both print-based and completely online journals, although the guidelines were written specifically for online publications, which include 'serial journals and magazines that are specifically designed for digital access and that circulate on the World Wide Web, in library indexes, or in some other digital medium', not hybrid journals that are designed for print and then distributed online (CELJ, 2008, n.p.). Some guidelines are self-explanatory to scholars with publishing experience – for instance, 'peer review, editorial staff, and editorial boards' asks whether a journal does, in fact, have peer review? Who is the editorial staff and board, and what are their reputations? In a webtextual-only journal, the questions

change slightly. For instance, how does peer review change from double-anonymous, traditional review to open, collaborative peer review when digital media argumentation is involved? The function of peer review becomes an object that must be analyzed through a scholarly, social and technical infrastructural lens. That is, one must address the scholarly scaffolding in a discipline that allows for open review instead of traditional, closed review; the social networks that support collaborative and open discussions of scholarship under consideration; and the technical systems that afford this scholarly and social version of peer review to happen (see Ball, 2012, 2013; Ball & Eyman, 2015; Eyman & Ball, 2015).

Our goal in this chapter is to expand that discussion to a broader set of journals and disciplines as a way to promote the possibilities of webtext publishing. Thus, we apply the methodological framework for electronic publishing toward the CELJ guidelines, as listed in correspondence to their infrastructural focus in Table 11.1.

As we discussed in the peer-review example, many of these guidelines cross infrastructural definitions, but two of the key concerns – editing and web design – do so more than others, especially in webtextual publishing.

Table 11.1 Crosswalk between publishing infrastructures and CELJ guidelines

<i>Publishing infrastructures</i>	<i>CELJ guidelines</i>
Scholarly	<ul style="list-style-type: none"> • Mission statement • Submission guidelines • Timely review • Style • Advertising • ISSN
Social	<ul style="list-style-type: none"> • Peer review • Editorial staff • Editorial board • Affiliations • Contract or publication agreement • Timeliness and regularity of publication • Availability
Technical	<ul style="list-style-type: none"> • Archiving • Accessibility • Indexing and abstracting

Editing

The CELJ guidelines define *Editing* with the following entry:

Editing: Electronic periodicals should make sure the work they publish is edited and proofed for proper grammar and has no formatting, typographical, or spelling errors. Poor editorial work indicates a lesser degree of organizational integrity. If a journal intends exceptions to this general rule, it should have particular reasons for doing so. (CELJ, 2008, n.p.)

As stated above, editing applies to the written text of any scholarly publication, and that text can be in any or several languages or appear in any media. Our concern here is with the grammars of multimedia – modes of communication have social semiotic practices, literacies and forms. Concerning webtexts, we have argued (Ball & Eyman, 2015) that editing of multimedia journals includes not only attention to typography and orthography, but also to style in the *design* of a webtext. We call this practice ‘design-editing’ – a part of the editorial workflow that focuses on the rhetorical and aesthetic appropriateness of a ‘design as a whole while also ensuring a design’s accessibility, sustainability, and usability’ (CELJ, 2008: n.p.). Design editing occurs before and after a webtext has been accepted for publication, with different levels of editing taking place depending on whether the text is in development or production. Design editing ‘ensures that a webtext is not only appropriate in scholarly and designerly ways but also in technical ways that will allow the piece to be read without significant interruption far into the future’ (CELJ, 2008: n.p.). The submission guidelines for a journal that publishes webtexts should include information about design-editing criteria, which might be listed as technical criteria or the like. This way, authors will know what is expected of them in the designs of their webtexts. Indeed, CELJ (2008: n.p.) listed this information under the Submission Guidelines category: ‘Detailed instructions for submitting work to be distributed in online media – including, for instance, recommendations for accessibility and usability in line with the mission and readership of the journal – are essential’.² Thus, in the analysis of journals below, we look to these submission guidelines as one method of determining the editorial policies for design, and we look to the webtexts themselves to see whether the designs are edited for rhetoricity, usability, accessibility and sustainability. For instance, in the three journals under discussion in this chapter, we might examine how editing processes are discussed (if at all) in the journals’ About, Editorial or Submission sections.

The *Journal of Artistic Research* (<http://jar-online.net>) has been publishing research on artistic practices since 2013. Like the other examples discussed in this chapter, *JAR* exclusively publishes webtexts. *JAR* has separate

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pages for Submissions, Peer Reviewing and Submission Design in its main navigation. The Submissions page invites authors ‘from all fields and disciplines in which artistic research may be relevant, including areas that may not usually be conceived of as “artistic”’ and calls the webtexts they publish ‘expositions’, which they define as ‘a multi-media document that can combine and interlink text, image, film and audio material on one or more scrollable pages’ (n.d., ‘Submissions’ page, filename: /index.php/pages/view/123).³ The discussion of how the expositions are made using an online editing space called the Research Catalogue is given significant space on this page. Once authors have a login for that space, they are offered online tutorials for building expositions that can be turned into screen experiences viewable as web pages. Their peer-reviewing guide offers specific evaluation criteria for these webtexts. These criteria include the following guiding questions for reviewers, each of which includes elaboration on the topic:

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provide
author for
(n.d.)

- (1) Which aspects of the submission are of interest/ relevance and why?
- (2) Does the submission live up to its potential?
- (3) How does the submission expose practice as research?
- (4) How well do design and navigation support the submission? (/index.php/pages/view/128)

In addition, *JAR* also offers suggestions for the design of submissions, including a whole page of the site (with links) dedicated to this topic, which begins with the following open-ended suggestion:

The Research Catalogue allows for submissions to be laid out and designed freely. Text or media can be placed anywhere on a page allowing for different reading experiences and, ultimately, a different understanding of the research. It is best to look at the past issues of *JAR* to get a sense of how this may work and what may be possible. (/index.php/pages/view/130)

The style document linked to this page offers several stylistic templates for authors to use when creating their work in HTML. These templates offer column widths and other specific technical suggestions for authors to follow.

Audio-Visual Thinking: The Journal of Academic Videos (<http://audiovisualthinking.org/>) describes itself as ‘a leading journal of academic videos about audiovisuality, communication, media and design’. *Audio-Visual Thinking* is cross-disciplinary, publishing videos as a means of meaning making. (Stand-alone videos are much easier to publish inside existing CMS. A-V Thinking, however, uses HTML, not a CMS, which makes for an increased amount of human labor. This extra work is, perhaps, why the journal is currently on hiatus as they discuss a better technical infrastructure to use.) This journal has been publishing since 2010 and

has changed from an editorially reviewed publication to a peer-reviewed publication, as announced on their website. The introduction of peer review suggests a level of developmental editing that occurs during this review period. Their submission guidelines are succinct, relying on the technical requirements of the videos (less than 50 MB, which is rather small for a video, so the files must be highly compressed – as Flash video files [.flv] and under seven minutes in length), which leaves open the directions authors and peer reviews might take in composing and revising the videos.

As mentioned, the third journal we use as an example – *Kairos: A Journal of Rhetoric, Technology, and Pedagogy* (<http://kairos.technorhetoric.net>) – is one we certainly know well. As mentioned earlier, two of us are editors of the journal – Ball for 15 years and Eyman for 20 – and the third, Morrison, has been a reader and unofficial promoter of the journal for 20 years and on the editorial board for the last 5 years. *Kairos* has been publishing webtexts since 1996 in the field of digital rhetoric and writing studies. It uses a tiered, collaborative peer-review process where staff and then editorial board members provide revision feedback for submissions in most journal sections. Although the journal does not offer specific evaluation criteria for webtexts, the submission guidelines are offered in detail on the journal's Submissions page,⁴ including technical, design and code requirements for webtexts. In addition, the Editorial page includes detailed descriptions of the peer-review mentoring process.

Web design

Each journal has more or less information about the design expectations for authors, but the webtexts themselves also provide implicit content for potential authors to analyze. Through close, rhetorical readings of how or whether a text's argument is made through its technological and mediated components, an author can get a better sense of the scholarly values each publication venue supports. This type of reading relates to the web design portion of the CELJ's guidelines, which is not only about design editing for style (social and scholarly infrastructures) but also for the readability, usability, accessibility and sustainability of a piece – issues that transcend the boundaries between the social, scholarly and technical. The CELJ guidelines define web design as the following:

Web Design: The principles of design in online journals are significantly different from those in print journals. Although some online journals model their designs on the look of print publications, others may foster and present interactivity and provide opportunities for (1) authors to design texts that make meaning from the advantages and capacities of multimedia elements (linking, video, etc.) on the Web; and (2) viewers and readers to post their comments for other readers and to communicate

with the authors or artists and with the editorial staff. Designs should be appropriate to the content and should serve the scholarly and creative material presented. In addition, online learned journals do well to provide viewers and readers with navigation instructions. Each time content is updated, the date and volume/issue number (if appropriate) should be clearly noted. (CELJ, 2008: n.p.)

AU: Please verify insertion of CELJ, 2008 before n.p.

We see that this definition of web design can be better understood analytically when reframed through the three infrastructures for scholarly publishing:

- Rhetorical use of multiple media (*scholarly, social, technical*)
- Social media and communicative interaction (*social, technical*)
- Navigation instructions for readers (*social, technical*)
- Presence of publishing apparatus (*scholarly, technical*).

These web design guidelines don't discuss related issues of design editing that include the accessibility, archival and preservation needs of multimedia work, which are crucial to the longevity of a journal's content, but those issues should be considered as equally important alongside the success of the content itself, as discussed below.

Rhetorical multimedia

The concern of the rhetorical use of multiple media is exhibited in the web design category's discussion of 'design[ing] texts that make meaning from the advantages and capacities of multimedia elements (linking, video, etc.) on the Web' in relation to designs being 'appropriate to the content' and serving 'the scholarly and creative material presented' (CELJ, 2008: n.p.). Numerous scholars in digital writing studies have elaborated on the rhetorical nature of multimedia in webtexts (see, e.g. Ball, 2004; Ball & Moeller, 2007; Purdy & Walker, 2012; Rice & Ball, 2006; Walker, 2006; Whipple, 2010). Below, we present three selected articulations of rhetorical multimedia from single pages of each journal to show how multimedia elements may contribute rhetorically to scholarly meaning making.

Analytically, the first example (Figure 11.1) from *JAR* presents an instance of splash screen that indexically draws on photographs, words and hyperlinks to create a multimodal table of contents that signifies the collection of multiple paths through the argument symbolized by the hand grasping a bunch of vegetables. This opening screen thus also communicates layers of related content and their multimodal relations. The second example also from *JAR* (Figure 11.2) juxtaposes word and image in a horizontal reading pattern, privileging neither logocentric nor visual modes as van Leeuwen and Kress (1995) argued. Juxtaposition is a typical meaning-making strategy used in webtexts to create interpretative relationships between multiple modes of communication (see Purdy



Figure 11.1 A webtext from JAR on global food practices includes a multimedia splash navigation page



Figure 11.2 Inside the global food webtext from JAR, word and image are juxtaposed (with linked text) on a horizontal reading plane



Figure 11.3 Webtexts in Audio-Visual Thinking presented as videos inside a frame of the whole journal

& Walker, 2012). In the third example (Figure 11.3), from *Audio-Visual Thinking*, videos are indexical of their disciplinary fields, making rhetorical arguments through contexts that are embedded within each video's semiotic modes and formal aesthetic production choices. Because videos rely on timelines to persuade, a screenshot of a video is a less successful rhetorical medium to convey a summarization of its argument, but the videos in *AV-Thinking* itself tend to persuade through the genre of 'Think Pieces' (as a featured section of the journal) rather than the scholarly critique that other genres of webtexts provide.

Social media and communication

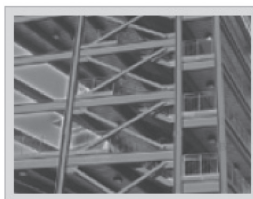
The CELJ (2008: n.p.) guidelines for web design features in online journals also suggest that 'viewers and readers [could] post their comments for other readers and ... communicate with the authors or artists and with

the editorial staff'. In 2008, there were few CMS options that allowed for commenting, even as that method of reader interaction was growing in the interest around open peer review and post-publication review (see Fitzpatrick, 2010). Nowadays, it is more common to see reader interaction in the form of comments on blog-style CMSes adapted for editorial use. None of the three journals here use that kind of CMS, and of the three, only one – *JAR* – offers reader comments as a regular feature of its webtext publication. However, even *JAR*'s offering of reader comments links readers to a separate website where they have to create a unique login in order to participate. Although *Kairos* experimented with reader feedback in its very early years, it deemed the experiment not effective (in pre-social-media days), and these days, in non-CMS versions of journals, discussion, if any, seems to take place on social media such as Facebook and Twitter, where the technical infrastructures better support the uptake of mediated scholarly dialog. There is a gap between user/reader studies of social media and dialog in public fora and how social media might be used to promote scholarly communicative exchange in dialog form – an interactive process that is not well supported (if at all) in scholarly publishing platforms. And this lack of integration, or opportunity, for scholarly dialog within the publications themselves (multimodal or not) represents a lack of technical infrastructure.

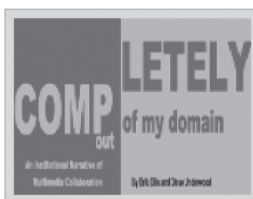
Navigation instructions

Providing navigation instructions, per the CELJ guidelines' suggestion, could refer to either a journal-level navigational system (see Figure 11.4) or a webtext-specific navigational system. CMSs tend to offer expected navigational structures in the form of sidebars or drop-down menus with pages, although – as stated earlier – since most of the webtext journals are purely HTML-driven journals, whole-journal navigation systems may be more or less employed. In all three example journals, there is whole-journal navigation offered as a menu either at the top or along the side of the main pages of the journal.

However, once you get into the individual webtexts, the navigation systems change radically. In *JAR*, wireframes outline the layout of webtexts (based on the HTML templates mentioned earlier) and, within each webtext, are presented as a static screenshot via the top-level navigation menu option. In *AudioVisual Thinking*, webtext content is contained within the video that is embedded within the journal interface, so webtexts have no separate navigation instructions other than the movie buttons that most users of the Web will be familiar with. In *Kairos*, the navigation systems can be slightly more complicated than *JAR*'s; since each webtext is uniquely designed by the author, navigation instructions, if available, are specific to the webtext.

CoverWeb: Infrastructures of Writing**Infrastructure and Pedagogy: An Ecological Portfolio****Ron Balthazor & Elizabeth Davis**

"Our concern with the interaction and interplay between writers, writing instructors and assessors, and technology is part of our interest in understanding the complexities of infrastructure through this ecosystemic frame. In this text, we consider the foundational structures, the architectural supports, of our current writing ecology and then move on to survey the larger landscape of research and debate how to build and sustain a thriving ecosystem of writing and writing instruction and assessment."

Completely Out of My Domain: An Institutional Narrative of Multimedia Collaboration**Erik Ellis & Dave Underwood**

"For writing instructors and technical support staff, our informal collaborative experiment suggests the potential value of stepping outside one's comfort zone—one's domain—to forge institutional relationships that either don't exist or that lack dialogue and depth. For writing program administrators, our experience might serve as a reminder that innovation often happens at the margins."

Transnational Writing Programs: Emergent Models of Learning, Teaching, and Administration**David S. Martins, Design by Patrick Reed**

"Efforts on the part of specific individuals, particular programs, and professional organizations to be change agents within various spheres of influence (i.e., within particular programs, departments, institutions, or national and international contexts) is understandably difficult given the dual challenge of bringing change to both the practices as well as the infrastructures that can support (but can also thwart) the activities of writing instruction."

Figure 11.4 Screenshot (from the August 2015 issue, Table of Contents) showing thumbnail designs representative of webtexts all composed in HTML, but with implementations of javascript and (in the above two cases) video

It is possible that the more visually interactive a webtext is, relying on modes of communication other than the linguistic as a traditional primary mode of scholarly communication, the more likely a webtext is to have navigation instructions for readers (see, e.g. D. Anderson, 2003; E. Anderson, 2011; Fagerjord, 2005; Wysocki, 2002), although sometimes the instructions are a simply 'Open' or 'Enter' (e.g. Delagrange, 2009; Yergeau

et al., 2014). More research would be needed to confirm whether the presence or absence of navigation instructions in webtexts is, indeed, related to the use of non-linguistic modes. As scholarly disciplines become more socially accustomed to webtext publishing and reading, the need for navigation instructions will probably decrease.

Publishing apparatus

The final element of the CELJ's (2008: n.p.) web design category that we will examine is that of the top-level publishing apparatus for webtextual journals: 'Each time content is updated, the date and volume/issue number (if appropriate) should be clearly noted'. This criteria was set with more types of blogging and periodic publishing in mind, not necessarily those online journals that follow more traditional volume/issue publication schedules. However, even among more traditional volume/issue-based webtext journals, some don't prominently display *when* an issue is published (this is sometimes related to a lack of easily navigable top-level menu options that cross the entire journal).

In the case of our example journals, the volume/issue and date are prominently displayed on the journals' index pages, archive pages, individual issues and – in the case of *AV Thinking* and *Kairos* – within the webtext pages themselves. The reason the publishing apparatus isn't prominently displayed in *JAR* is because the journal – as one based in artistic disciplines – foregrounds the design of individual webtexts so heavily that

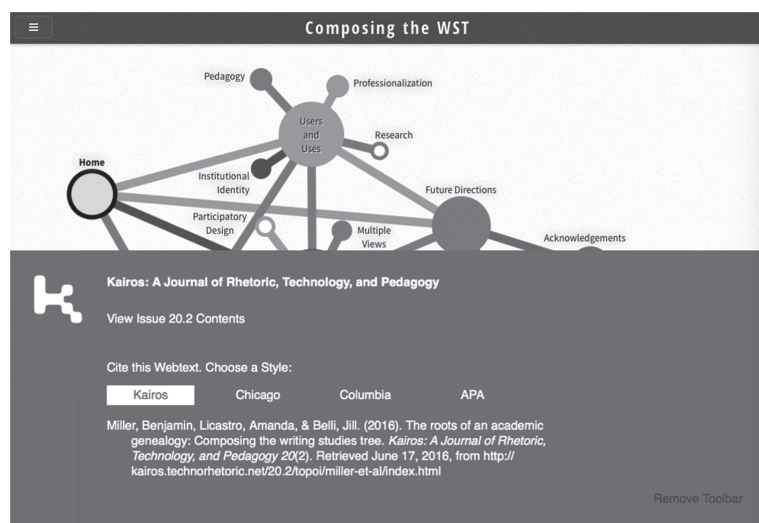


Figure 11.5 Screenshot from 20th anniversary issue of *Kairos*, showing the reader toolbar opened to the site-wide navigational and citation options

there's no space for indicating the journal-wide publication information on the individual webtexts. *JAR* webtexts are set to pop out of the journal structure and include no browser toolbar, which might indicate a URL, for instance, that could contain the volume/issue or date. *Kairos* doesn't use pop-outs for its webtexts; instead, it provides a relatively unobtrusive reader toolbar that is attached to every webtext, which marks each one as being contained within a certain volume/issue (see Figure 11.5). The volume and issue numbers also appear in the URL, since the journal's web architecture (i.e. file and folder structure) is built around a nested set of folders that move from the whole journal down to the individual author's webtext in a specific section of an issue of the journal (e.g. <http://kairos.technorhetic.net/vol.issue/section/authurname/>).

Conclusion

We have provided these examples from the perspectives of both author-readers and editor-publishers so that readers of this chapter can gain a sense of the internal and external roles played by these infrastructures when considering starting or submitting to a webtextual journal. These infrastructures are important considerations not only for editors and publishers of such venues⁵ but also for readers and authors who are interested in finding, reading and composing innovative scholarly works in multimedia. Indeed, these infrastructures work together, so that a journal must have a scholarly infrastructure that supports a social infrastructure and vice versa; as well, the technical infrastructure must support the scholarly and social infrastructures, but – and this is one of the major challenges with the digital-journal landscape right now – the social and scholarly infrastructures should not have to be constrained or changed because of the lack of technical infrastructure. And yet that happens all the time (see Ball, 2015) – a journal (or press) cannot publish the kinds of work it wants or peer review in the method that it would prefer because the technology doesn't exist in a way that allows it to support those scholarly and social infrastructures. Sometimes the technology does exist, but it may be too expensive or too difficult to manage given a journal's human and economic resources.

This idea connects to a platform with potential global reach – one called 'Vega' – which is borne out of a need to support these infrastructures in a more sustainable way. We authors are working with developers to build this new academic publishing platform (<http://vegapublish.com>), which will promote open-access, multimedia publishing. We hope Vega will make possible more global, scholarly venues through its free and open-source codebase that makes designing and editing webtexts (and other variations on traditional scholarship, including data sets and video essays) easy for authors, editors and publishers. While at the time of writing,

Vega is concluding its first year of development on a three-year timeline, it promises to offer a robust CMS that will support all of the scholarly, social and technical infrastructures that the publications above – and many others, webtextual or not – can implement in their own designs.

Further attention will still be needed to address key issues facing scholarly publishing in a global context: multilingualism and multiliteracies, diverse cultural expression and articulation through multimedia texts, matters of infrastructure and access and professional and organizational memberships and participation, along with distributed knowledge sharing through open access. We will need knowledge galvanized through practice and made material through situated sociocultural mediation; such practice will allow us to both prefigure potential scholarly communicative avenues and rhetorically deploy form and shape in emergent and context-rich webtexts. This might happen in different languages, and at times with a preponderance of certain media types, it may be realized in wholly experimental performances that heuristically encourage us to look beyond the given and the known and to engage with the changing character of academic and professional literacies. Given that this method of academic discourse lives not only in our disciplines but also in the world around us, our hope is to show the breadth of disciplinary and research-based work possible through multimodal discourse and its scholarship.

Notes

- (1) See the notes that each journal has posted about their hiatuses on their respective websites: <http://www.audiovisualthinking.org/submissionform/>, <http://harlotofhearts.org/index.php/harlot> and the 'About the Journal' section at <http://www.borrowers.uga.edu/about> (accessed 21 September 2016).
- (2) Much more could be written about *accessibility* and webtext publishing in this context. Due to the length of discussion possible on this one guideline alone, we have elected to set it aside for space reasons and refer you to other publications for the moment. See, e.g. research by John Slatin, director of the Accessibility Institute at the University of Texas at Austin for many years; the 2013 *Kairos* special issue on 'Accessibility and Multimodal Composition' and the 'Access/ibility in Digital Publishing' webtext in the 20th anniversary issue of *Kairos* (Eyman *et al.*, 2016).
- (3) To reference specific URLs within a cohesive website meant to function as a whole work, we have adopted a URI-specific notation format as referenced here, based on the root domain, which, in this case would be <http://www.jar-online.net/>. This website uses an undetermined content-management system, which is based on PHP, and the pages are labeled by random numbers (e.g. 123) instead of rhetorical filenames (e.g. submissions).
- (4) For more information on why *Kairos* does not offer specific evaluation criteria for its webtexts, see Ball (2012).
- (5) As part of publishers, we include librarians who are increasingly taking on the role of publishers in addition to their roles as preservationists of the scholarly record and research aides (co-researchers) for scholars.

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