

Swinburne University of Technology

Lisa Gye

On the way to electracy

Abstract:

This paper examines the impact of the transition from literacy to electracy on the arts and humanities classroom through an examination of two teaching experiments conducted by the author. These experiments focus on mystory and remix as instances designed to address the challenge of inventing modes of writing suited to the apparatus of electracy. Tracing a line from Ulmer through to Mark Amerika, the author argues that the time has now come to fully embrace the impact of networked media in the classroom through the incorporation of mystorigraphy and remixology practices in the networked arts and humanities classroom.

Biographical note:

Lisa Gye is a senior lecturer in Media and Communications at Swinburne. Her research interests include remix cultures and writing for new media. Her mystorigraphical work 'Halfives' has been archived by the National Library of Australia and is available at <http://catalogue.nla.gov.au/Record/383546>.

Keywords:

Mystory – Remix – Pedagogy – Ulmer

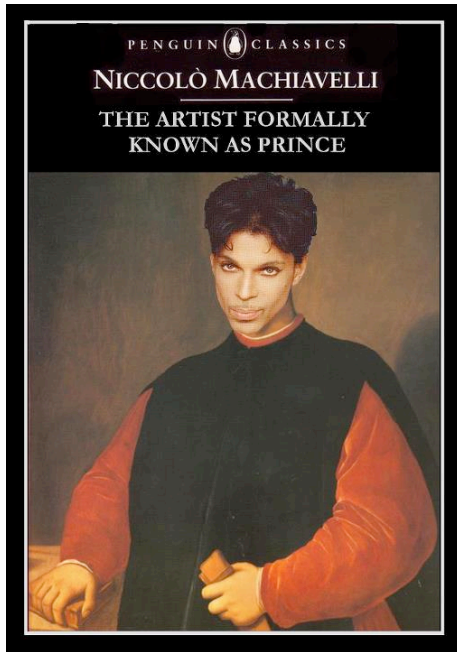


Figure 1: Student remix

It would be an understatement to say that introduction of networked computers into university classrooms in the 1990s had a dramatic impact on the ways in which knowledge was produced, reproduced and disseminated in the arts and humanities disciplines. New modes of reading, writing, connecting, collaborating and publishing have all emerged from the transformative shift that occurred when internet-connected computing became widely available to those teachers and learners in the academy who, at that time, were more accustomed to crafting words with paper and ink. Despite the tremendous number of changes that appear to have occurred in the past twenty years, the transformation from literacy to what American scholar Greg Ulmer has termed electracy is only beginning. We are still positioned at the moment of the emergence of electracy. This means that we are still in the process of inventing rhetorical strategies for the apparatus of electracy for arts and humanities education. In the same way that modes of writing suitable for the apparatus of literacy – the essay, the treatise, the report and so on – had to be *invented* within the context of educational institutions in order to take advantage the new features of the apparatus, so too are we now faced with the same challenge to invent modes of writing suited to the apparatus of electracy. Following a discussion of Ulmer's term electracy, I will outline two experiments undertaken in my teaching that have attempted to address the challenge of inventing modes of writing suited to the apparatus of electracy.

Ulmer and electracy

Greg Ulmer has been concerned with the kinds of changes that take place as a result of the transition from a predominantly literate culture to an electronic culture and his primary concern has been a pedagogical one – that is, he is interested in how learning is transformed by the shift from the apparatus of literacy to the apparatus of what he comes to term electracy. The term *apparatus* is important here as it refers not only to

the technologies of print or computing but also to the ideologies and institutional practices assigned to or produced by those technologies. As Ulmer points out:

In terms of the academic apparatus, [theorists of the apparatus] would relate the technology of print and alphabetic literacy with the ideology of the individual, autonomous subject of knowledge, self-conscious, capable of rational decisions free from the influences of prejudice and emotion; and to the practice of criticism, manifested in the treatise, and even the essay, assuming the articulation of subject/object, objective distance, seriousness and rigor, and a clear and simple style. The ‘originality’ we require from the students engaged in making such works as well as the copyright with which we protect intellectual property are features of this apparatus. (Ulmer 1989, 4)

As outlined in *Teleteory* (1989) and pursued in his subsequent books *Heuretics: the logic of invention* (1994), *Internet invention: from literacy to electracy* (2003) and most recently *Avatar emergency* (2012), Ulmer investigates how one might go about inventing practices that may institutionalise the electronic apparatus in terms of schooling that in turn produces new subjectivities, or ways of knowing about oneself and the world. Ulmer argues for the supplementation of the currently dominant critical and interpretative modes of inquiry in learning (critique and hermeneutics) by a more experimental mode known as heuristics (Ulmer 1994, xii). Michael Jarrett describes heuristics as ‘hermeneutics pushed around’ (Jarrett 2007, 89).

[H]euristics is a readiness strategy. It is more than that, certainly. But from the start, I want to emphasise that heuristics is a way to prepare for writing in – both in the sense of ‘ushering in’ and ‘working within’ – an emerging digital culture. (Jarrett 2007, 89)

Tracing its origins as a theological term from the Middle Ages, Jarrett demonstrates that as the flip-side of ‘hermeneutics’, in structuralist terms its Other, heuristics offered readers of scripture an alternative way of using the material. When filtered through ‘a hermeneutic, an institutionally established and sanctioned grid that enabled literal, allegorical, moral, and anagogical readings’ one could produce (and reproduce) doctrine – ‘verifications of truth – or the application of doctrine in the form of lessons or homilies’ (Jarrett, 2007). A heuristic approach turns this on its head by asking not ‘what do I make *of* this?’ but ‘what can I make *with* this?’ As Jarrett notes:

Such ‘readings’ might seem revelatory (‘Eureka!’). Conversely, they might seem heretical, depending on how interpretive communities responded to what was invented (see the case of Joan of Arc). The point is, hermeneutics yielded ‘readings’ that seemed discoverable in scripture. They seemed to have been placed there. The interpreter showed his audience what the text (and, by implication, its author and its ultimate Author) said. Meaning was not imposed upon the text; meaning arose from the text. Or at least that was the general idea – contested and critiqued now for a few hundred years. Heuristics, then, was hermeneutics that failed or sounded dubious. Such a reading practice seemed a lot like writing. It generated the sneaking suspicion that ‘readings’ were not recovered; they were made – made from the text. The interpreter (consciously or not) had used the text to say something – used it as a pretext for his own purposes. In effect, hermeneutics turned into heuristics – turned

reading into writing – any time an interpretation was received or regarded as an invention. (Jarrett 2007, 89)

The application of heuristics in the electrated classroom changes the relationship between the student and the texts that they encounter. The question is not ‘what do I make of this text?’ but rather ‘what can I make *with* this text?’

This simple redirection of attention turns the student from a reader to a writer – not an interpreter of others’ writing but a part of the compositional machine.

Mystory

My first experiences of applying these ideas in the classroom were framed by Ulmer’s suggestion of mystory as a genre of writing suitable to the electrated apparatus.

According to Ulmer:

[M]ystory is the title for a collection or set of elements gathered together temporarily in order to represent my comprehension of the scene of academic discourse. It is an idea of sorts, if nothing like a platonic *eidos*, whose name alludes to several constituent features (generated by the puncept of ‘mystory’). (Ulmer 1989, 83)

I, and others, have written elsewhere in detail about mystory (Gye 2003) so I will not repeat that here except to note that Ulmer has now extended mystory, as a genre, in his new work *Avatar emergency*, into a collaborative mode of inquiry.

My initial attraction to mystory as a compositional mode in the networked classroom was grounded in the belief that mystory was capable of activating hyperlogic (a distinctly electrated mode of thinking), while situating the mystoriographer within a designated subjectivity that is context sensitive. By allowing students to draw their writing material from a broad range of discursive frames (the popular, the disciplinary, the familial and the institutional) and modes (text, video, image and audio) mystory aims to validate the students’ position in relation to knowledge. It does not aim to produce universal truths but rather lets specified subjectivities speak in the full context of their localities. The pedagogical value of this lies in the positioning of the learner as an active participant in the production of knowledge rather than as a consumer of already decided ‘truths’. This ‘learning’ is then represented through an individually designed user interface where the student must decide how the reader navigates the material they have discovered and brought together through the mystoriographical research process.

In practice, students are invited to investigate a theme of their choosing. They have to research this theme across the various discourses. Students are encouraged to be attentive to moments of epiphany (what Ulmer calls the Eureka moment) where seemingly disparate objects and ideas produce a sense of correlation. This correlation need not be based on reason or logic but on the sense or feeling that things belong together. The object of the exercise is not to necessarily discover some already known ‘truth’ that exists outside of their own experience but to look for patterns in the material that signify a view of the world that is produced and produces their own

experience. Once they have gathered their materials, they must find a way to collect the material online in the form of an audiovisual hypertext that others can navigate.

Working in this way raises a number of critical issues for students attempting to write within the apparatus of electracy. One of these is the fact that students are still so inculcated in the apparatus of literacy that they are both initially resistant to and suspicious of an academic practice that does not conform to the articulation of subject/object, objective distance, seriousness and rigour, and ‘clear and simple’ style that their academic training, in the form of essay writing and examinations, has hitherto insisted is the proper mode of academic discourse. The kind of writing that mystoriographical research produces looks suspiciously like art. And, of course, in a sense it is, in that the demand that students design an interface to their research forces them to consider the aesthetic properties of the material with which they are working as well as work with a variety of text types including images and video. For arts and humanities students, untrained in both art and design, this produces, for some, a tremendous sense of anxiety. It is, one might imagine, the same state of anxiety that visually trained students encounter when they have to express themselves by way of writing. Yet, given the importance of the image to electracy, it is also a necessary next step in their academic training. It is no longer enough to be able to manipulate words if one is to communicate ideas to a range of audiences in a range of contexts. As Ulmer argues:

Electrate pedagogy is based in art/aesthetics as relays for operating new media organised as a prosthesis for learning any subject whatsoever. The near absence of art in contemporary schools is the electrate equivalent of the near absence of science in medieval schools for literacy. The suppression of empirical inquiry by religious dogmatism during the era sometimes called the ‘dark ages’ (reflecting the hostility of the oral apparatus to literacy), is paralleled today by the suppression of aesthetic play by empirical utilitarianism (reflecting the hostility of the literate apparatus to electracy). The ambivalent relation of the institutions of school and entertainment today echoes the ambivalence informing church-science relations throughout the era of literacy. (Ulmer in Gye 2002, 17)

If our arts and humanities classrooms are going to be places where electracy is going to be invented, students will need to be familiar with all aspects of what Jacques Derrida describes as ideo-picto-graphic writing (Derrida, 1976). Writing is seen in this formulation as coming less from some divine creative spark than from a process of selecting already available sources where the students take material from the archive of their own and others’ experiences in order to create something new. This is the principle of the codes in Barthes’ *S/Z* in which any text contains all previous and all possible texts to come since they are iterations of a structural sameness: ‘voices... whose origin is ‘lost’ in the vast perspective of the *already-written*’ (Barthes, 1974, 21).

The question of originality, and its centrality to the literate apparatus, is put at stake in the making of a mystery. While, in many respects, ‘[p]lagiarism is useless in electracy since learning involves designing the user interface (website/database/expert systems) in a way specific to the unique, singular qualities of the learner’s sensibility,

experience, memory’, the mystoriographical process encourages students to borrow from a broad range of sources when researching and compiling their mystories (Ulmer in Gye 2002, 17). Consequently, questions of copyright and plagiarism arise in the compositional process. In a world where the ability to cut, copy, manipulate, sample – in a word, remix – is now available to anyone with a computer and some simple digital tools, an insistence on the distinction between originals and copies makes less and less sense. At the same time, copyright-protection regimes are becoming more and more draconian. In educational environments, this plays itself out as a battle between those that want to use the material of culture in their writing in inventive ways (on the way to a new electracy apparatus) and those that want to hold onto literacy as the only way to reproduce the world and the word. This is completely understandable. The question of what comes next in the shift from one apparatus to another is fraught with difficulties, as the shift from a predominantly oral culture to a predominantly literate one has already shown (Ong 1982; Havelock 1981). In education, the tried and tested methods of examining student knowledge acquisition and writing skills – the essay and the examination – remain as the dominant assessment tools used in the arts and humanities disciplines. But they are under pressure from a culture that has embraced digital technologies that make the ability to access, copy and reuse extant materials not only easy but, ironically, important skills in the development of new knowledge and the acquisition of cultural literacy. Even more pertinently, in order to be effective participants in a networked culture that sees us immersed in media representations that act as ‘source material everywhere’ students need to be able to do more than reproduce forms that are becoming, however slowly, obsolete but encouraged to experiment with forms that are yet to come (Amerika 2011).

From mystory to remix

Let us return to the question of heuristics. If heuristics invites us to ask ‘what can I make *with* this?’ then the second experiment I have undertaken in my teaching that directly addresses the challenge of inventing modes of writing suited to the apparatus of electracy uses mystoriography as a springboard for exploring remix culture. The relay between mystory and remix joins a self-consciously scholarly approach to electracy (mystory) to its vernacular counterpart (remix). While mystory emerges from a deliberate attempt to invent practices for the electracy apparatus, remix emerges from the same networked capabilities of everyday life experienced outside the university in literature-, art-, music- and image-making cultures. Remix, in this sense, is a form of organic heuristic practice that becomes more visible in the age of networked media.

According to writers such as Eduardo Navas, remix is a self-conscious contemporary practice grounded in the conscious and deliberate re-use of found material (including the material of ideas): a cut-copy-and-paste aesthetic that includes mash-ups, cut-ups, remixes, re-dubs, machinima and similar material (Navas n.d.). Tracing a history of remix practice through avant garde art takes us back to Dada and surrealism, musique concrète, pop art and acts of postmodern appropriation. In its vernacular form, remix

has its origins in the use of sampling in popular music made possible by the widespread use of electronic recording technologies in the 1980s. At the same time that Ulmer was formulating his ideas in relation to electracy and pedagogy, DJs were already making new records by juxtaposing and mixing fragments of already-made records into new tracks, taking advantage of the cut and copy capabilities of new-media technologies – making their own culture out of the existing culture as compilers rather than consumers.

The ease with which one can take from the cultural ether and reuse materials in one's own cultural productions is facilitated by and underscores the explosion of material available in networked culture. Apart from the now standard use of sampling in music, remix as a compositional practice can be found everywhere on the internet from YouTube videos through to Wikipedia entries. As Navas points out:

The concept of Remix often referenced in popular culture derives from the model of music remixes which were produced around the late 1960s and early 1970s in New York City, an activity with roots in Jamaica's music. Today, Remix (the activity of taking samples from pre-existing materials to combine them into new forms according to personal taste) has been extended to other areas of culture, including the visual arts; it plays a vital role in mass communication, especially on the Internet. (Navas nd)

Apart from the deliberate reuse of material in the making of new work from found material, social-media practices associated with platforms such as Facebook encourage a remix sensibility by allowing users to easily share material sourced on the internet on their own and others' timelines, creating spaces that look remarkably like the mash-ups that are a feature of remix culture.

As well as vernacular expressions of remix culture, artists such as Soda Jerk and Mark Amerika use remix in their art practice. Soda Jerk's reflexive commentary on copyright infringement titled *Hollywood burn* is one cycle in an ongoing engagement with remix culture through remix practice that also includes the poignant time travel series, the *Dark matter cycle* and the history of rap and hip-hop, *Astro black* (see <http://www.sodajerker.com.au/>). Mark Amerika's *remixthebook* and its accompanying web resource remixthebook.com both reflect on the artist's role as a remixologist and allow for ongoing and endless remixes of the book itself. Amerika argues for a different understanding of cultural production that undercuts arguments with regards to individual creativity. For him, the shift is more seismic – we are all remixologists. In his words:

For if Remixology is anything at all
it is an ongoing valuation of one's
Lifestyle Practice as an aesthetic fact

one that integrates selectively manipulated data
into its pattern of intensiveness
a pattern that is aesthetically perceived as
the novel production of togetherness
in its phase of (nonstop) origination

(imagine it as an eternally remixable ‘originary’
that *comes with* endless feeds of
streaming **Source Material Everywhere**) (Amerika 2011, 42)

For Amerika, remix is the natural outcome of living in the moment of our transition to electracy. His response to the explosion of cultural production produced on and circulated through networked media environments is heuritic – ‘what can I make *with* this?’

Teaching remix

While mystery, as previously noted, is a distinctly scholarly intervention designed to address the challenge of inventing modes of writing suited to the apparatus of electracy, teaching remix requires a repositioning of the student in relation to a culture that forms a part of their ‘natural’ habitus. Teaching remix involves asking students to recognise the scholarly implications of vernacular remix practices that are more usually seen as part of the flow of media in which they are immersed. In order to do this, students are asked to consider remix practices through the lens of writers such as Roland Barthes (intertextuality) and Jacques Derrida (iteration/différance) as well as theories of narrative and genre. Framed within the context of an emergent electrate apparatus, remix is heuritics in action. Mark Amerika provides the connection between Ulmer, heuritics and remix when he observes that in his own remix practice he experiences ‘a continuous string of spontaneous discoveries resonating with all the preceding manifestations of *just-in-time* Creativity itself...I refer to these just-in-time and often surprising manifestations of Creativity as eureka moments’ (Amerika 2011, 53). Intuiting connections between media is identified by Ulmer as a key feature of writing under electrate conditions. As Ulmer argues in *Heuristics*, writing as intuition rather than as analysis is well suited to the electronic environment:

The multichanneled interactivity of hypermedia provides for the first time a machine whose operations match the variable sensorial encoding that is the basis for intuition, a technology in which cross-modality may be simulated and manipulated for the writing of an insight, including the interaction of verbal and non-verbal materials and the guidance of analysis by intuition, which constitute creative or inventive thinking. (Ulmer 1994, 140–41)

Intuitions may not always be, in the end, ‘right’. But they can provide an avenue for experimentation that allows the learner to speculate – remembering that the root of the word speculate is *spectare*, to see – and to find a direction through writing rather than writing coming ‘after the fact’, so to speak. Remix allows students to ask ‘what might happen if I put this with that?’ which is an extension of the question ‘what can I make *with* this?’

Students are invited to test these ideas through the creation of their own remix. They can use text, image, sound, music, video and any combination of these. Again, as arts and humanities students, they are often challenged by the use of technology but are often surprised by how readily they adapt to the challenge. It is interesting to observe how innately most understand the codes and conventions of narrative and genre when

they undertake their compositions. Students are then required to reflect on their compositions in an accompanying exegesis, describing how their own compositional process and finished product incorporates their understandings of theories relating to remix culture. The image at the start of this essay is one example of the work produced.

Conclusion

Just as surely as oral cultures validate memory, linking it to wisdom, and print cultures validate rational argument, linking it to intelligence, electronic cultures are now beginning to validate composition – the ability to construct picto-ideo-phonographic texts – linking it to invention. Heuristics proposes a methodology for exercising the cognitive operations necessary for functioning within a new electronic paradigm, for defining literacy anew. (Jarrett n.d.)

The impact of networked media technologies on the arts and humanities classroom has indeed been profound. Our response to this challenge as educators will be largely determined by whether we see these changes as destructive (impacting negatively on the literate apparatus and its associated skills, values and ideologies) or as an opportunity to participate in the invention of the electracy apparatus (heuristics). It may be that we have no choice but to embrace this change but we do have a choice about the manner in which we incorporate it into our own practices. Writing back in 1989, Ulmer observed that ‘the time has come to think in positive terms about how to bring academic discourse into the age of television’ (Ulmer 1989, 17). The time has now come to fully embrace the impact of networked media in the classroom through mystorigraphy and remixology and to consider this question posed by Amerika:

Is our ability to remixologically inhabit
naturally selected source material
an innate trait based on inheritance and/or informed habit? (Amerika 2011, 193)

Either way, we are living, working, learning, teaching and creating at a time of significant change, at the moment of the emergence of electracy. Now, what can we make with that?

Endnote

Figure 1: Example of student work used with permission.

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