

## Electracy: The Internet as Fifth Estate

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This account of an experimental approach to apparatus invention is offered as an introduction to apparatus study in general (grammatology), and electracy as the digital apparatus in particular. The approach is that of the Florida Research Ensemble (FRE), working through the EmerAgency, a virtual consultancy developed to translate Arts & Letters pedagogy into institutional consulting. The term 'electracy' (modeled on 'literacy,' a portmanteau of 'electricity' and Derrida's 'trace') was adopted to clarify that digital technologies are not reducible to a 'media literacy,' but include, besides technological innovations, inventions in the dimensions of institution formation and related skill sets, and identity behaviors individual and collective (ethics and politics). Current members of the FRE include Gregory Ulmer (University of Florida), John Craig Freeman (Emerson College), Barbara Jo Revelle (University of Florida), Jack Stenner (University of Florida), Jan Holmevik (Clemson University).

### Disciplinary Paradigm: The Internet Accident

Based on the premise that every invention includes its own disaster – to invent the ship is to invent the shipwreck – Paul Virilio observed that we are now beginning to experience the catastrophes that go with the innovations introduced since the beginning of the Industrial revolution (the era of electracy). The ultimate disaster, Virilio says, is that of the General Accident, or Time Accident—a possibility created by digital technologies, especially as they evolve the capacities of telepresence. The electracy apparatus has created a pollution of dimensions that Virilio calls the 'dromosphere' ('dromos' = 'race').

Because of the instant speed of electronic media, our civilization is becoming trapped in the present moment. All trajectory of departure and journey is compressed into Now. If the oral apparatus ran on cyclical time, and the literate apparatus on linear time, electracy runs on now time. In the dromosphere no civic sphere is possible, and hence no democratic process, since there is no time for deliberative reason or critical thinking, or persuasion by the exchange of arguments: the decision has to be made in an instant. In short, however advanced might be the technologies produced by the sciences of pure reason, the ethical and political reasoning of individuals and communities are reduced to the intuitive biases that Malcolm Gladwell called 'blink.'

The context of grammatology shows that this crisis is not unanticipated. The blink is in the family of 'prudence,' which always has been assumed to work in an instant of immediacy, without concept or universal rule. The Ancients classified prudence (*phronesis*) as a virtue, since they were not convinced that it was teachable, although it might be trained through force of habit. One had presence of mind, *savoir faire*, *sprezzatura*, or one did not. One knew how to do and say the right thing at the right time or one did not: *kairos*. The FRE proposes

to design a *prosthesis* (both the equipment and the users' skill-set) for deliberative reason in the moment of blink. Electracy does for the blink of intuitive judgment what literacy did for analytical reason—augments the mind-body aptitude with the language apparatus, to create 'artificial judgment'.

### Theory

Grammatology – the history and theory of writing – addresses the challenge of the General Accident from the perspective of apparatus shift. The Internet is an institution emerging within electracy, which is to digital media what literacy is to alphabetic technology. Literacy is not only a technology of writing, but also the institution of school and its practices (method, definition of concepts, topical argument), and identity formation (selfhood, the democratic state). Grammatology does not follow in the footsteps of the masters (to borrow an aphorism from Basho), but seeks what they sought. The emergence of science out of the practices invented by the Greeks within the new institution of school (Academy, Lyceum) provides an analogy for what is needed today for the Internet—not just faster equipment with more memory, but also faster thought, to bring individual and collective human memory up to speed.

Many commentators have declared the need for a new logic native to new media, but few have indicated how to invent it. Heuristics (the logic of invention) provides one proven (literate) procedure for bootstrapping from one apparatus to the other. This method involves working analogically. The key analogy is with the Greek invention of metaphysics, meaning specifically (in Aristotle's terms) the invention of a category system. Electracy needs a mode of classification that does for the digital image what the concept did for the written word (definition as a practice organizing things according to essences and accidents). Virilio's Museum of the Accident explicitly plays on the pun relating modern disasters such as Chernobyl with the relation of 'accident' to substance in Western metaphysics.

This analogy shows that what electracy needs is an image category enabling decision-making in now-time. The Greeks distinguished between two fundamental modes of reason—pure and practical knowing. Pure reason concerns necessity and evolved into science as the study of the laws of nature. Practical reason concerns the contingencies of the lifeworld, matters of ethics and politics, involving choice among different options (*proairesis*). Both modes evolved throughout the era of literacy in a loosely coordinated way, at least until the Enlightenment. Practical reason was associated with the virtue of prudence (*phronesis*), the ability in the midst of a particular situation to make a decision based on lessons of the past that produced a good result in the future. Prudence reasons in the future perfect tense (what will have been). A feature of Roman-Christian

syncretism in the medieval era was the association of prudence with memory, manifested in adaptations of Classical mnemonics (memory palace) to meditations on the virtues and vices as a pedagogy of salvation.

In the Renaissance the alliance between pure and practical reason began to dissolve and the invention streams of science and ethics/politics began to separate. To see what is at stake we need only note that Machiavelli is to prudence what Descartes is to science. The purpose of Machiavelli's *Prince* and *Discourses* was to teach the art of applying the 'rules' learned from the past to particular situations on a case-by-case basis. Gramsci took up this challenge in the 20th century, dubbing it 'hegemony,' while proposing that the new prince must be not an individual but a group, such as a political party. Poststructural theory continues this evolution, as in the work of Ernesto Laclau (building on Lacan and Derrida), redescribing hegemony as a hybrid of the logics of difference and equivalence. In the absence of the old universals (the Polis, God, Reason, Utility), collective identity must rely on a new category system that gathers disparate entities (things, people, institutions) into sets by means of a logical 'rat bridge' (Laclau's phrase, alluding to Freud's Rat Man case: meanings constructed using the principles of tropical dreamwork). The Internet institutionalizes a political unconscious.

### Memory

Grammatology places the invention of the Internet in the context of the history of memory. When during the Renaissance Camillo built his two-room prototype of a working memory palace, to get funding from the king of France, the invention stream was still intact: the equipment (the rooms lined with drawers filled with the writings of Cicero and designed to generate original orations) and the skill-set (mnemonic method of places and images associated with information). The identification of prudence with memory became entangled in the era of print with the search for a perfect (universal) language. The Egyptian hieroglyph was mistaken as a version of the language of Adam, with emblems capable of direct communication of reality. The role of places and images in mnemonic practice took on the magical powers of hermetic science. The stream was still connected by the time of Leibniz, who participated in the shift in this search for an absolute logic to Chinese as the model. Leibniz praised Chinese civilization for its superiority to Western civilization in the area of practical reason. The *I Ching* was one of the great inventions of all history, being a popular practice for allowing ordinary (even illiterate) citizens to use the wisdom philosophies (Taoism, Confucianism, Buddhism) for making everyday decisions.

The Chinese lesson (*via* Leibniz) for electracy is that image categories (image metaphysics) work in the manner of an oracle (the querent actively supplies from personal experience the 'parole' of the consultation). Camillo's memory palace and other related systems (Lull's wheels) are the direct predecessors of Babbage's calculating engine, Bush's Memex, Nelson's Xanadu, and finally of the Internet itself. The bias of the

Enlightenment favoring pure reason, however, separated memory equipment from mnemonic logic, which went underground, following the channels of hermetic magic, and producing along the way the mystical tarot. Kant promoted aesthetic judgment to the status of a faculty of mind, intended to bridge (rat bridge) the chasm separating pure and practical reason, but whose outcome historically was an acknowledgement that the two-cultures split is metaphysical. Memory and prudence reentered mainstream philosophy in later Heidegger, whose reading of Aristotle's ethics influenced his turn from 'science' (pure reason, ontology) to practical reason (*Ereignis*), reasoning in the moment of a particular situation (from 'being' to 'belonging to him'—two meanings of 'sein'). Meanwhile, as Jacques Lacan testified, the hermetic, esoteric tradition codified in the Neoplatonic Academy of Florence during the Renaissance, was appropriated and internalized as the 'unconscious' in the theory and practice of psychoanalysis. An alternative description of the unconscious is not that it is structured like a language, but that it communicates in the manner of a Renaissance humanist.

The practice of memory also survived in modernist poetics (Baudelaire's correspondences, Rilke's *Weltinnenraum*, Eliot's objective correlative, Joyce's epiphany, Proust's involuntary memory, to name some of the most prominent examples). Heidegger took his authority from Heraclitus, who, referring to the Delphic oracle, stated that the world neither revealed nor concealed, but gave a sign (Wink). Heidegger's effort to articulate the event (*Ereignis*) of situated decision, without contamination by the vocabulary of ontology (that is, without literate philosophy), is a point of departure for the most interesting aspects of Derrida's thought (among others). The challenge of now-time for deliberative reason, following Derrida's *aporia*, is that time for humans is always 'out of joint,' haunted by potentiality. Benjamin expressed a similar insight in his work with the dialectical image, explicitly formulated as Now-time (*Jetztzeit*), as did Freud with the technique of transference. The grammatological insight of this history is that the invention of electracy emerges from the reintegration of these two invention streams -- science (equipment) and mnemonics (rhetoric).

### The Experiment

Beginning in the early 1990s a collaborative arts group called the Florida Research Ensemble (FRE), undertook a long-term experiment to design and test an image category and its related logical practice. Ulmer theorized the category as 'chora' in *Heuretics* (1994), based on Derrida's collaboration with Peter Eisenman on a design for the Parc de la Villette in Paris. 'Chora' is a Greek term for 'space' or 'region,' given metaphysical importance in Plato's *Timaeus* as the dimension of mediation in which Being and Becoming (universal forms and particular matter) interacted. Aristotle preferred a more restricted notion of abstract place (*topos*) as a metaphor for logical or mental space, although chora remained active in the tradition through Ptolemy and the development of

geography. Conventional chorography, that is, supplements the exact geometric measures of cartography with mimetic resources of the plastic arts. To indicate the deconstructive element in his use of the term, Ulmer dubbed his practice 'choragraphy' (with an 'a'). 'Chora' is to electracy what 'topic' is to literacy, placing discrete literate concepts into holistic field constellations, replacing inference with (strange) attractors. Choragraphy as an electracy mnemonic is a hybrid of the Western memory tradition and the Eastern mnemonics of oracles (with the prototype being the *I Ching*). Meanwhile, traditional chorography prospers in the technical register of electracy, as currently instantiated in Google Maps.

The purpose of the experiment is to design and test a practice of practical or deliberative reason for the apparatus of electracy. The experiment is framed in terms of consulting, as a practice for the EmerAgency, a distributed consultancy. The EmerAgency constitutes a collective shifter, a transcendental group subject supported by online applications coordinating the testimony of citizens, enabling them to participate in public policy formation and decisions. The Internet through EmerAgency consulting may function as a fifth estate, adding a citizen voice to the agenda-setting powers of the other four estates (three branches of government plus journalism). The potential role of social media in constituting an electracy public sphere is apparent in a movement such as Occupy. Social media perform an intersubjective logos, gathering people in specific locations as well as virtually. The missing element is a rhetoric, an electracy logic capable of interfacing individuals with total data and information, to produce distributed singularities (collective awareness of agency). The logic of crowd reason remains to be invented.

The prototype for the consultancy was developed for the city of Miami. The occasion was that of an 'image crisis' that resulted from a series of tourist murders in the state of Florida. The FRE project began as a critical counterpoint to the official response, which was to hire an advertising agency to repair the state's 'image'. What was the 'attraction' of Florida? To supplement the attention given to tourists, the FRE focused on Haitian immigration. The triggering incident was the arrival in the Miami River of a large boat filled with undocumented Haitians. This incident motivated the selection of the Miami River as the choral site. The goal was to create a digital chora--a virtual memory--mediating between the actual city of Miami, and the media image (spelled 'Myami').

The Miami River is a site of every policy problem existing in Florida, with some thirty-four different agencies having overlapping and conflicting jurisdiction. This region is dubbed a 'zone,' alluding to the sense of this term in Marker and Tarkovsky, with connotations of Joseph Beuys's city 'wound'. Literacy does not provide a means to think these jurisdictions together, holistically. Chora as an image category provides just such a holistic thought orchestration. Chora is a coordination into an

intelligible pattern of a set of topoi contingently associated with a particular place and time. The Web chora supporting citizen consultation on the relationship of Miami-Myami is named 'Miautre' (a creolized my-other). The name alludes to Derrida's *Politics of Friendship* (my friend, *mon ami, mi amigo, Mi-ami*).

## Design

### Level 1: Chorography

The first level begins within the traditional practice of chorography, updated to exploit the mimetic and plastic resources of the most advanced imaging technologies. Freeman created a representation of the river 'zone', combining existing satellite and aerial photographic maps with 360-degree panoramas at each of the 'hot-spots' discovered in the zone. This level corresponds to the places of a memory palace (usually based on the public streets and personal spaces familiar to the maker).

### Level 2: Chorography

The second level was produced by Revelle, a creative photographer, using a version of situationist psychogeography. Revelle lived at an Inn on the Miami River for five weeks, in the Summer of 1998, and drifted daily through the zone, recording her 'encounters' with the locals, using still photography and video recordings. This level corresponds to the 'active images' of a traditional memory palace. It also exploits the 'mirror' effect reported by Antonio Damasio and other neuroscientists -- the capacity of humans to recognize and construct their own being through features of external environments (epiphany).

### Level 3: Choramancy

The third level concerns the interface metaphor, experimenting with the mode of citizen consultancy, formulated as a hybrid or syncretism joining Western consulting (specialized knowledge applied to public problems) with Non-Western divination (consulting an oracle for personal problems). The goal of the experiment was to capture the mood or attunement of the zone, and to use this mood or atmosphere to visualize an emergent situation resulting from the peculiar mix of problems/topoi gathered in Miautre. To this end, Revelle served as querent to the FRE diviner. Before undertaking her drift she posed a question of personal concern. She wanted to understand her troubled situation with respect to her partner (Ron). At the end of the five-week residency, the FRE group reviewed Revelle's materials (photographs, video interviews, journals), and found a pattern of material 'winks': used mattresses showed up as symptoms of at least three different public policy problems: gentrification; homelessness; Haitian trading vessels. Revelle was offered the three policy settings as answers to her question. She recognized her situation in the dilemma of the traders. Their boats were impounded by the Coast Guard, as part of a policy to eliminate substandard ships from the Miami River port. This policy of impoundment produced a parable or fable effect, giving through the hypotyposis of a proportional analogy an image of her love relationship with her partner.

The full report documenting the Miami prototype is available as an ePub (Community University Research Alliance, Small Cities Imprint): <http://smallcities.tru.ca/index.php/cura/issue/view/5>

### Work In Progress

An outline of EmerAgency projects is documented at <http://emeragency.electracy.org/>.

The Miami experiment, for example, is projected as an Internet prototype called the Ka-Ching: the cash register onomatopoeia alludes to the syncretic nature of an updated oracle functionality, that does for global practical reason what the I Ching and tarot (among others) did for pre-modern civilizations. The difference between traditional oracles and the Ka-Ching is that the former were composed by sages as established wisdom, while the latter is open source, distributed, generated on the fly interactively, by those who consult it (crowd sage). The challenge facing democratic policy formation in conditions of the dromosphere is how to coordinate all levels of decision-making in an instant. The divination/consulting interface promises to do that, by making explicit the mutual dependence of public collective and personal individual decisions (politics and

ethics) on the logics of identification (Laclau's difference and equivalence, dream work and commodity).

By making the data of a public-policy dilemma the vehicle for a fable about an individual's personal dilemma, a double awareness is created in real time: first, citizens are motivated to pay close attention to the details of public problems, since these hold the clues to their own problem. Second, this level of scrutiny modifies the behavior of public decision makers, who realize that their actions are being monitored by the general public. The digital capacities of the Web to register the collective effect of individual searches create a feedback loop, contributing agenda-setting priorities based on citizen acts of identification (hegemony). The larger ambition of the Ka-Ching is to serve as the means by which a group (collective) subject becomes self-aware of its agency. The fundamental knowledge addressed in EmerAgency consulting is the experience of well-being. The insight calling for a transformation of global policy formation is that the individual human body in its capacities of need, demand, and desire, is the dimension of reality made accessible to ontology in electracy.

## Key Pedagogic Thinkers Paul Natorp (1854-1924)

Gabriel Eichsteller & Sylvia Holthoff, ThemPra Social Pedagogy

Paul Natorp is often considered one of the first *social* pedagogical key thinkers and has played a vital role in shaping social pedagogy in Germany. Born to a Protestant minister in Düsseldorf/Germany in 1854, Natorp lived in turbulent times: despite its failure to unify the Germany states, the Revolution in 1848/1849 had changed the political landscape and social order by ending the feudal system; and from around the 1830s the Industrial Revolution had been leading to increasing urbanisation as people moved from rural areas to the cities with the aim to find work in the factories. As urban areas grew, so did social problems such as exploitative working conditions, homelessness and starvation.

Having studied music, history, and philosophy, Natorp soon became an influential social philosopher during his time as professor for philosophy and pedagogy at the University of Marburg. Together with his colleagues, Natorp became known as part of the so-called Marburg School, which gradually established social pedagogy as an academic discipline in its own right. Natorp was not the first to coin the term 'social pedagogy', which had been previously used by Adolph Diesterweg and Karl Mager in 1844, and many social pedagogical ideas date further back to earlier social and educational philosophers, such as John Amos Comenius, Jean-Jacques Rousseau or Johann Heinrich Pestalozzi; yet, Natorp is often considered the 'birth father' of social pedagogy as he was the first to develop social pedagogy

in any significant way (Niemeyer, 2005). In doing so, Natorp introduced the term social pedagogy to a broad audience stretching beyond the academic discourse and into the public domain (Wendt, 2008).

### Influences and Ideas

Natorp's social pedagogy can be conceptualised as a social philosophy of upbringing, which draws its key influences from Plato, Immanuel Kant and Pestalozzi. As Niemeyer (2005) notes, in order to understand Natorp's work, it is essential to consider its relatedness to the social philosophical thinking prevalent at that time, which was dominated by the ideas of John Locke, Rousseau, Pestalozzi and Kant. All of them were concerned with the structure of society and its implications for inter-human relationships. Similarly, pedagogical thinking at Natorp's time was no longer merely focussed on the individual child's upbringing but reflected upon its contribution towards creating human togetherness and societal order.

In his philosophical perspective Natorp was influenced by Plato's ideas about the relationship between the individual and the *polis*, the city-state. Plato imagined the polis as an organically constructed human-society, an organism that aims towards justice and follows reason. In Natorp's understanding it 'is geared toward the spiritual life and the complete educational development of each person in it. The person, after