

Antonymic Exchange

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Abstract

Antonymic Exchange is an artist-run operating system, an idiosyncratic means of developing “algorithmic literacy,” and an engine capable of generating rich swathes of cultural dark data. In this ongoing project, artists Carl Diehl and Lindsey French carry out a conversation through a daily exchange of images, retrieved using search engines, then shared over electronic mail. Exactly what aspects of an image will be decoded antonymically remains unspecified, and either artist might, at different times, respond in opposition to formal aspects, conceptual connections, cultural cues, or other vectors of antonymic analysis. Querying contemporary and non-traditional instantiations of “algorithmic culture,” the artists cast a wide net. Along with information theory and cultural analytics, the artists draw inspiration from the “writing machines” of the Oulipo, the estrangement of urban networks as envisioned by the situationist practice of *dérive*, and the “intimate bureaucracies” of mail-art. Quarterly reports are compiled every three months, exploring the relationships between images, the search terms and other terms of negotiation that each artist employed.

Keywords

antonymic, algorithmic, dark data

Introduction

Antonymic Exchange is an artist-run operating system, an idiosyncratic means of developing “algorithmic literacy,” and an engine capable of generating rich swathes of cultural dark data. Astute information scientists will wonder if there isn’t a procedural dimension to the Antonymic Exchange, or, as Google might inquire: *Did you mean “algorithmic”?*

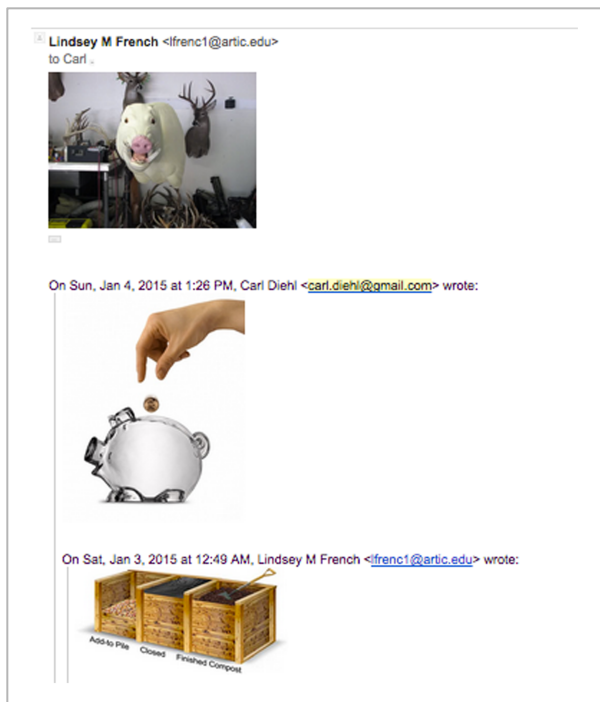
In this ongoing project, artists Carl Diehl and Lindsey French carry out a conversation through a daily exchange of images, retrieved using search engines, then shared over electronic mail. The perceived banality of this sort of exchange is betrayed by an oppositional approach to correspondence within contemporary network culture. Extending the antonym beyond its conventional literary context, the artists assemble the material of their exchange; an aggregate of visual resources.

Using the antonym as a critical framework for analyzing and informing responses to incoming images, the artists selectively and antagonistically cultivate an image-based vocabulary of exchange. At once politically and semanti-

cally motivated, these acts require an interstitial orientation towards querying globally networked databases of imagery. Whereas Google’s search engine is designed, as writer Nicholas Carr has argued, to “promote the speedy, superficial skimming of information,” the antonym serves as a catalyst for the artists to respond against the implicit velocity of information consumption. [1] Working within the dominant visual vocabulary of Google and the purview of antonymy, each image exchange yields new communicative idioms and, eventually, provides a vernacular subset of data which the artists might subsequently draw on in the generation of new texts. Optimization of this system’s performance is at odds with the standard measure of accuracy that qualifies effectiveness in automated information retrieval systems. In this context, relevant results are paradoxically linked to the artists’ adherence to a contradictory model of pattern recognition.

The Antonymic Exchange is contained within the body of an email, and consists entirely of images sourced from Google’s image search. Each participant responds to the received image with another image determined after an “antonymic” consideration. Conflating encoding and encryption, the artists consider appropriate responses while simultaneously working to disguise outgoing forms in the cloak of “antonymity.” Exactly what aspects of an image will be decoded antonymically remains unspecified, and either artist might, at different times and to varying degrees, respond in opposition to formal aspects, conceptual connections, semantic dissonance, cultural cues, or other vectors of antonymic analysis.

For example, in one exchange, an image illustrating three stages of composting, from adding organic debris, to covering and retrieval of finished compost was answered with a photographic image of a penny being dropped into an empty piggy bank. Here the operative antonym might be interpreted as Marxist, as the use value of this natural recycling process increases the longer its content sits, while that which sits in the piggy bank does not. Alternately, or additionally, the first image is a realistic drawing of a compost bin while the latter is an abstracted stock photograph of an actual hand depositing a penny into a glass piggy bank. In the next image, the hollow exteriority of the piggy bank is opposed by the internal stuffing of the taxidermy form of a wild boar. The cartoon version of a domesticated pig is replaced by a form devised to aid a realistic Figure 1: Screenshot of three images within the email thread of the Antonymic Exchange.



tic re-presentation of a wild animal. One image points towards a private act of storage and saving, while a social vector at play in the other is one of display (Figure 1).

Along with each artist's rationale, dark data for these exchanges includes the string of words that were used by each artist to search for suitable representations of their respective antonymic concepts. The exchange functions by way of alternating tasks, artist-to-artist, with each image posed as a response to that which was previously received. In each artist's turn, a text-based terminology must first be abstracted around the received image. These terms are then routed through the "black box" of antonymic analysis, then searched for again, often repeatedly. A suitable image is eventually settled upon and sent off, shifting the responsibility of antonymic analysis back to the other artist. As the exchange is cultivated between the artists, the voice of Google's image search database pervades. Set against Claude Shannon's diagram of a general communication system, the "lossy" antonym and the corporate curation are the noise, generating an unclear message poised for response. [2]

The algorithmic logic of "instructions, steps and results" has stealthily infiltrated techno-social situations, global economies and political policy-making.[3] The "algorithm", in turn, has been cached by the cultural imagination. From Cultural Analytics and the visualization of massive datasets to the Internet folklore surrounding auto-corrected texts and the design fiction world of the Digitarians, wherein inhabitants are comfortably tyrannized "by technocrats, or algorithms...as long as everything runs smoothly;" the implications of procedural solutions are manifest within many forms of social and cultural commentary. [4]

Along with these contemporary examples, Diehl and French find insight in the Oulipo, or, "workshop for potential literature," an early expression of algorithmic literacy. Since 1960, this group of writers has devised a variety of simple formal interventions, literary constraints that privilege strict rules over chance operations; "algorithmic" procedures with the potential of generating novel forms of literature. Digital Humanities scholar Stephen Ramsay has championed the Oulipo in his discussions of computer-aided text analysis, praising the capacity of constraints to temper the perceived risks of "excessive subjectivity" in the unaided human mind while also flaunting the cold, quantifying logic of computation. [5] "Antonymy," an Oulipian constraint requiring "the replacement of a designated element by its opposite" is directly reflected in Diehl and French's operations. [6] In a literary context, antonymic translations might target letters, words or phrases, replacing each of these units with a compatible adversary.¹ Antonymy is ostensibly visual in Diehl and French's exchange, each image received is met with critical reflection and interpretation as detailed above. This consideration is then followed by the quotidian activity of keyword searches in hopes of revealing relevant images. Situated within the privacy of an email thread and also embedded within the broader infrastructure of the Internet, the Antonymic Exchange is also reminiscent of what art historian Craig Saper's terms an "intimate bureaucracy." Appropriating the international postal network as a platform for subversive play, artists' groups such as Fluxus and the New York Correspondence School functioned as intimate bureaucracies by "[making] poetic use of the trappings of large bureaucratic systems and procedures...to create intimate aesthetic situations, including the pleasures of sharing a special knowledge or new language among a small network of participants." [7] While those who practice mail art work within the constraints of letters, envelopes, stamps, and postcards, Diehl and French utilize the parameters of various Google applications, from Gmail to Image Search, Google Docs and Spreadsheets. [8]

The multivalent nature of these communicative systems allow for slippages in formal rules. In comparing natural language and algorithms, Andrew Goffey identifies a pragmatic dimension (language does things, algorithms do things - they are both embodied in materials and executed through actions). Distinguishing the two, Goffey writes,

"While formalization comes afterwards with natural languages, with algorithms, formalization comes first, the express aim being to divorce (formal) expression from (material) content completely" [9]

Within this framework, the Antonymic Exchange exists closer to a language than a process, the enactment of the antonym a resistance to predetermined formalization. Re-visiting Foucault's description of the algorithm as a statement,² the new texts of the Antonymic Exchange offer not

¹ For example: the word 'dog' might replace 'cat.'

² Goffey recalls Foucault's description in *The Archaeology of Knowledge*. "to speak is to do something—something

statements but questions, or perhaps, nuanced non-sequiturs aimed at disrupting the formation of machine-readable cultural statements. These gestures serve as creative disruptions of cultural patterns, moments to navigate away from an anticipated path for the sake of avoiding predictability and entertaining the critical potential of what Geert Lovink has speculatively proposed as “antagonistic or dialectical programming.” [10]

In contradistinction to the “anything goes” model of non-sequitur, or chance operations associated with Surrealism, an effective antonym must maintain some modicum of harmony with its opposite. Pursuing an aesthetic of interruption, yet tinged with aspects of continuity requires ingenuity and deliberation. Inherent in this process is the risk that the vectors of “Synonymy” may become too pronounced, resulting in droll caricatures of the recommendation engines used by Amazon and Facebook. [11]. The artists must remain committed to “[finding] ways to make compelling, complex play environments using the intricacies of critical thinking to offer novel possibilities,” as Mary Flanagan asserts in her discussion of criticality in games. [12]

The consistency of a daily practice strengthens one’s ability to maintain opposition. Within a history of artists devising constraints and naming restraints, the artists find agency in adhering to their own restrictions, alongside parallel structures of power. In his discussion of the rhetorical prowess of algorithms, author Chris Ingraham calls for the crafting of one’s own algorithms to achieve full algorithmic literacy.³ Anti-algorithms then, including, but not limited to, The Antonymic Exchange, offer opportunities to maintain agility within the interstitial spaces of a daily image search.

By opposing the synonymic path of least resistance, an unplanned circuit in search of the antonymic compels the artists to digress. Drifting through the landscape of globally networked image databases, these irregular jaunts recall the experience of a psychogeographical *dérive*. Not unrelated is Michel De Certeau’s consideration of the “spatial practice” of walking in the city, in which the philosopher describes the pedestrian as “a spatial acting out of space.” [13] If the wanderings of an urban pedestrian constitute an action of speech, an analogue would be the browser path

other than to express what one thinks, to translate what one knows, and something other than to play with the structure of language.” His suggestion to replacing “speak” with “program” offers a more directly political read of the rhetorical power of the algorithm.

³ “achieving full algorithmic literacy in the coming years will eventually mean acquiring the technical chops to generate algorithms of one’s own.” See Chris Ingraham. “Toward an Algorithmic Rhetoric.” In *Digital Rhetoric and Global Literacies: Communication Modes and Digital Practices in the Networked World*, ed. G. Verhulsdonck and M. Limbu (IGI Global: Hershey, PA, 2014), 69.

within the virtual architecture of the database, rhetorically envisioned as a city. Each search is an annunciation, and these annunciations are recaptured into language via the collected search terms. In the case of the Antonymic Exchange, the primary language of discourse is not the search terms but the image choice. This process is always incomplete, yielding images partially similar to preceding terms. It is exactly this broken logic that renders the process generative.

Within the Antonymic Exchange, dark data is abstracted individually, across a “rift isolation:” a quarantine, wherein parallel worlds of communication develop discretely. Quarterly report sessions serve as an opportunity for the rift to be temporarily breached, provoking an accelerated collision of the estranged strands of text-based language. This facet of the artists’ operating system reveals the residue of underlying decisions, including the search terms and antonymic analyses that each artist secretly and separately employed. Shedding light on this dark data, an inherent impossibility is revealed in the prospect of attributing authorship to any particular artist, algorithm, or image-provider for the production of new idioms.

The procedures that Diehl and French have developed in the Antonymic Exchange present alternative pathways through the database imaginary, novel forms of analysis and retrieval that are reliant on a reconfiguration of everyday human and machine relationships. The artists’ initial interest in remixing their dark data has been largely supplanted by a critical attention towards fine-tuning and performing their anti-algorithms. Here, perhaps, the Oulipian endeavor to devise “creations that create,” as opposed to “created creations,” can be understood as a tactical response to contemporary algorithmic culture. [14]

Developing data sets the long way, the wrong way, these acts of antonymic analysis tentatively exist on the periphery of searchability. This daily practice marks an understated opposition, a quiet friction, scraping against the algorithmic rhetoric of predictive solutions. To find an image’s antonyms is to identify not only its content, but to respond against automated computational processes.

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Author Biographies

Based in Portland, Oregon, Carl Diehl is an artist who also teaches courses in New Media Studies, History of the Moving Image, and Time Design at the Pacific Northwest College of Art and Portland State University.

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