

## Theatre of Information

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### The Season of Information

Imagine a series of points in space. Each point has a marker, an occupier, an object. An orchid, an artefact, a dust cloud; a bowl from a bygone era, peeking out of the sand. The unmoored planes of a well-known building. These things sink their talons into space, like spikes pointing here, here, here. They settle into their points. Like a suite of punctuation marks, they stretch into the expanding and contracting time signatures of thing-ness that swell around empty coordinates.

It's coming toward the Season of Information. Slowly, each object shakes off an idea of itself – its sleeves, its surface, its textures. Its moulting-form – its skin of information – unwraps the object from its empty shell of points. Infra-thin curls of past-ness and local dialect (of how and why it was made) gather up, ripple to a head. Then – flap! – in a flutter of gloves or projectile cuttlefish tentacles flicked to the n<sup>th</sup> degree, the skin of information shoots into nowhere, into everywhere, into somewhere. Information, untethered to the material forms from which it exudes, floats free. It steps lightly, abstracted somewhere between object and observer, as if it were possible to be attached neither to a sender nor to a receiver, but simply to the suchness of the space through which it swims.

Two skins of information, colliding carefully, can make a hybrid object. But where, and when? In Sam Smith and Andrea Zucchini's collaboration, shimmering hybrids suspend themselves between two fluid time signatures: that of a small fountain, inset into a floorplan/table, continually cycling a trickle of water; and that of two massive, stagnant, rectangular ponds, alive with algal blooms. (The lighting is so low that it's quite hard to tell, at first, that the algal surface is even liquid. Liquidity begets stagnation, which in turn speaks to solidity, the penultimate stagnation.) Between these quick and sluggish flows, hybrids hover in the dim light. They point to a past-ness, a pedigree – but also an impossible, recombinant future. An image of an archived ancient bowl slowly turns on screen to reveal peals of disturbance in its surface textures. These textures are not – are no longer – indexes of the bowl's construction process. Rather, they are scans the surfaces of Mars, as imaged from a recent NASA expedition. The floorplan of Eileen Gray's famed modernist masterpiece, the E-1027 villa in the south of France, is scattered into the skins of three table-like structures. The petals of a scanned flower have been inscribed with strange symbols. Two skins of information converge, one playing vessel to another's texture. The recombinant, informatic object takes on an oracular form; one image voices the other, presents the other, stages the other. One image – which stages a certain conception of distance (from us, from its object, and from its object's place-time) – clasps another symbol. A miraged message unfolds, virus- or crystal-ball-like, in its makeshift container, and articulates an authority of placement, a politics of revelation, a re-placement of information into (and onto) an idea of a material substrate, which never quite materializes in the low light.

## Information Politics

How does information cling to, relate to, conspire with materiality? How has information come to be understood as something that can be divorced from materiality in the first place? How might these questions be pulled at, experimented with, staged? These thought-seeds hover in the low-lit air between objects in various states of concreteness, orchestrated by a fountain trickle.

In an age of information politics (as Tim Jordan has called it), understanding the uneasy split between information and materiality has high stakes. It is worth taking a brief detour through the troubled history of information to think about why. As Ted Striphas has argued, an “algorithmic culture” depends on the emergence of the scientific concept of information in the 1940s.<sup>1</sup> Striphas uses the term “algorithmic culture” to define a broad realignment of the concepts of culture and technology, according to which there is increasing “use of computational processes to sort, classify, and hierarchize people, places, objects, and ideas, and also the habits of thought, conduct, and expression that arise in relationship to those processes”.<sup>2</sup> Algorithms, run by Internet services companies like Google, social network companies like Facebook, audience measurement tech companies such as Quantcast, information services companies such as Experian, ‘fintech’ (financial technology) startups such as ZestFinance, and many others,<sup>3</sup> increasingly automate the practices once associated with (human) cultural work: of sorting, evaluating, characterizing, and classifying objects, ideas and expressions.

As such, algorithms also radically shift the configurations of cultural authority associated with decision-making and truth-seeking. Historian Yuval Noah Harari dubs this shift “Dataism”.<sup>4</sup> In his schema, authority was relegated largely to the gods for pre-modern peoples. In modern times, humanism shifted the locus of authority to human feeling – to what was, in Jean-Jacques Rousseau’s 1762 treatise on education, “in the depth of my heart”.<sup>5</sup> Now, data analytics easily outstrip the human heart in many decision-making scenarios. From health decisions (such as pre-emptive mastectomies for carriers of genes linked to breast cancer) to choosing a partner for the best chance of long-term happiness, decisions of the future are likely to be based

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<sup>1</sup> B. Hallinan and T. Striphas, ‘Recommended for You: The Netflix Prize and the Production of Algorithmic Culture,’ *New Media and Society*, 2014, p. 3; G. Granieri, ‘Algorithmic Culture: ‘Culture Now Has Two Audiences: People and Machines,’’ *Medium*, 2014, <https://medium.com/futurists-views/2bdaa404f643> (Accessed 4 May 2014).

<sup>2</sup> Hallinan and Striphas, op. cit., p. 3; see also T. Striphas, ‘What is an Algorithm?’ *Culture Digitally*, 2012, <http://culturedigitally.org/2012/02/what-is-an-algorithm/> (Accessed 3 January 2014).

<sup>3</sup> For a more detailed account of some of these companies’ algorithmic activities, and a discussion of their implications, see J. Cheney-Lippold, ‘A New Algorithmic Identity: Soft Biopolitics and the Modulation of Control,’ *Theory, Culture and Society*, vol 28, no. 6, 2011, p. 164-181; Hallinan & Striphas, op. cit.; T. Gillespie, ‘Can an Algorithm Be Wrong?’ *Limn*, vol. 2, 2012, <http://escholarship.org/uc/item/0jk9k4hj> (Accessed 25 August 2014); T. Striphas, ‘The Abuses of Literacy: Amazon Kindle and the Right to Read,’ *Communication and Critical/Cultural Studies*, vol. 7, no. 3, 2010, p. 297-317; E. Pariser, *The Filter Bubble: What the Internet is Hiding From You*, New York, The Penguin Press, 2011; and K. Palmås, ‘Predicting What You’ll Do Tomorrow: Panspectric Surveillance and the Contemporary Corporation,’ *Surveillance and Society*, vol. 8, no. 3, 2011, p. 338-354.

<sup>4</sup> Y. N. Harari, ‘Big Data, Google and the end of free will,’ *Financial Times*, 26 August, 2016, <https://www.ft.com/content/50bb4830-6a4c-11e6-ae5b-a7cc5dd5a28c> (Accessed 30 August 2016).

<sup>5</sup> J. J. Rousseau, *Emile, or On Education*, trans. Allan Bloom, New York, Basic Books, 1979, p. 286.

less and less on the authority of human feeling, and more and more on the authority algorithmic prediction.

All of this, however, rests on the shaky foundations of information – the status of the raw data that feeds Dataism. According to Striplas, the emergence of the scientific concept of information in the 1940s was a key precursor to “algorithmic culture”, in that it made it possible to view all events and phenomena – from “genetic material to the temperature inside one’s home” to “the content of a novel”<sup>6</sup> – as, in some sense, comparable, quantifiable and similarly analyzable. Lars Qvortrup points out that since the 1940s, the term information has been fraught with controversy, as it has remained unclear whether information should be understood as objective – a ‘thing in itself’ – or whether it must come entwined with a subject, existing only relationally as ‘information-to-someone’. In response to this uncertainty, Qvortrup outlines four possible definitions of information on a spectrum from “information as thing” to “information as psychic construction”:

“Firstly, information may be defined as something (a thing or a substance) existing in the external world like heat, electricity, etc... i.e. as *a difference* in reality. Secondly, information may be defined as something in the external world which causes a change in the psychic system. Here, information may be defined as *a difference which makes a difference*... Thirdly, information may be defined as a change in the psychic system which has been stimulated by a change in the external world... here information may be defined as *a difference which finds a difference*... Fourthly, information may be defined as something only in the human mind, a concept or an idea. Here, again, information may be defined as *a difference*, now however as a cognitive difference...”<sup>7</sup>

Qvortrup’s account of information grapples with the gaps between information as such and information as meaning to someone, by extending Gregory Bateson’s famous definition of information as “a difference which makes a difference.” Yet N. Katherine Hayles calls into question even the abstractions and metaphorical extensions in Bateson’s version of the concept. She writes an account of these theoretical difficulties as they played out in the Macy conferences – an interdisciplinary series of conferences, held between 1941 and 1960, which housed many dialogues and debates that would influence how the concept of information would take shape. The earliest formulations of the concept of information (as in Claude Shannon’s) were extremely technical and limited to message probabilities; they explicitly bracketed out any relationship to meaning (which must always be relational and context-specific). Later formulations, such as Bateson’s “a difference which makes a difference,” involved extending these earlier iterations of information metaphorically<sup>8</sup>

Mechanism mixed with metaphor, such that it eroded the decisive split between information and meaning. This was in part, Hayles argues, due to the interdisciplinary

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<sup>6</sup> Granieri, op. cit.

<sup>7</sup> L. Qvortrup, ‘The Controversy over the Concept of Information,’ *Cybernetics & Human Knowing*, vol. 1, no. 4, 1993, p. 3-4.

<sup>8</sup> N. K. Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago, University of Chicago Press, 1999, p. 51.

nature of the Macy conferences, which made it difficult for highly technical definitions to gain traction. In a series of dizzying definitions and redefinitions, information theory, in Hayles' account, became "stripped of context... a mathematical quantity weightless as sunshine, moving in a rarefied realm of pure probability, not tied down to bodies or material instantiations".<sup>9</sup> Information theory was caught between one model by which it gained in universality, but lost its closeness with representation; and another by which it gained in embodiment, but lost in universality and quantifiability. The fact that a disembodied concept of information prevailed cannot but speak of the privilege of its theories' purveyors. Those whose labour is constantly embedded in context – such as Janet Freed, the Macy Conferences' stenographer – know full well that "information is never disembodied, that messages don't flow by themselves, and that epistemology isn't a word floating through thin, thin air until it is connected up with incorporating practices".<sup>10</sup> The very separation of information from materiality – which now seems a naturalized presupposition underpinning algorithmic culture – rests on shaky ground, set up by privileged subjects. Yet even so, the split has lodged itself so deeply in contemporary thought that we are stuck wondering what to do with it, how to get around it, how to restage a coming together of information-materiality.

### Theatre of Information

This is the place where the objects reassemble. Their infra-thin textures, shapes and histories have travelled far and wide. Now, they shake hands, trading their time signatures in a swap of swampy half-smiles. Pollen-belts of temporality rub up on everything, and it's not certain whose is whose. All folded into the act of travelling. Granular time-halos leak from every corner. Loosely, the textures cast off from one point slide into a form from another. Hybrid objects punctuate the theatre of information, with thin and thick grips that are hard to wear.

Addresses peel off the object, nauseating pulses that unfold into suburb-ashes and picket-fenced welts of information, pelting surfaces with shrapnel and craters. Craters of information once hurled, heaped, glistened.

I began this text with an attempt to visualize a halfway point between a disembodied concept of information and the embodied materiality which clings to its abstract coordinates. Given the fraught histories of the relations between information and materiality – not to mention how these uneasy relationships inflect (and perhaps even undermine) algorithmic culture's authority – I hope it has become clear why such visualizations might matter. In Smith and Zucchini's work, the disembodiment of information acts as a given, a part of our algorithmic-cultural legacy. But it is countered with a recombinant imagination that focuses on *re*-staging materiality after its ostensible divorce from information: in creating hybrids that stage the distances between information and objects, that produce new paths to embodiment. There is a need, this work seems to claim, for a theatre of information – a site in which

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<sup>9</sup> Ibid., p. 56.

<sup>10</sup> Ibid., p. 83.

information can be restaged, rematerialized, and recombine its cancelling of places in the crackle of a new, hybrid form.

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