Introduction

Data Loam: Sometimes Hard, Usually Soft.

The Future of Knowledge Systems

Although the Data Loam project officially started on 1 March 2017 with a successful PEEK grant award from the Austrian Science Fund (FWF), its roots run much deeper into the past. Like so many considerations, this one also started with a discontent that was at first dim, but which, with growing urgency, became more concrete over the years.

We, who still come from a world of books, libraries and archives, expected a fruitful explosion of knowledge from the ‘world wide web’. Along with its inventor Tim Berners-Lee, knowledge, we thought, would be available to all at any time in the future, unrestricted and free of charge. This accessible and literally bottomless resource would finally help put an end to misconception, ignorance and deliberately launched ‘alternative facts’. The generous circulation and exchange of unfettered information would at last enable all to partake in different forms of pedagogy, become acquainted with new stylistics of existence, enter into differing political practices, forge better forms of governmentality and open systems, foregrounding reason, science, poetics, art. After decades of a grey and very cold Cold War, finally an age of freedom, acceptance and peace would begin to emerge.

Perhaps there were just too many early Marvel comic book influences, perhaps there were not enough. But as naïve as these hopes might have been, it has nevertheless been painful not only to have witnessed how they have remained unfulfilled—and in many arenas, actively snuffed out; that is how, in the face of exponentially proliferating information systems, the collective promise to inhibit curiosity, curtail experimentation, reduce collective empathy and destroy the rule of law seems to grow stronger by the day. Coupled with this has been the rise of autonomous systems whose algorithms of machine learning / artificial intelligence are deeply entangled with dubious and disintegrating forces—forces that by no means wish to make possible the prosperity and happiness of all, on the basis of the ability to learn and share knowledge. At best, there seems to be an endless undermining of established knowledge-structure-production sites, including universities, art schools, science labs, although more often than not, the move is closer to a total destruction of these centres of creativity—targeted willingly and perhaps even eagerly.

The initial questions arising quite naturally from such a world view were the obvious: who generates and manages knowledge; who has access to it and what mechanisms are there to protect it? The institutions traditionally responsible for this have been constantly losing visibility and the will to finance them has decreased. As a result, what we initially began to develop in the Data Loam project was an exposition of the way in which universities and national libraries had become suppliers of insatiable data hordes, with the knowledge created and managed there as just another resource to be mined. But what also became clear was that many of the knowledge-based environments mentioned above (and we could add Google and other search engines platforms) did not have a particular political agenda as such. It was as if the knowledge business had spectacularly taken off in some sinister way, which in turn was (and remains) able to provide raw material for something even more devastating. It was not too difficult to find that the algorithms established for popular search engine enquiries always led to a single peak landscape of knowledge, one wherein the periphery was always-already forcibly deserted. To put this slightly differently, by following certain algorithmic codings which sought to categorise into manageable, indexical assemblages vast bits of data, more often than not, they were underwritten by the best placed corporate bids or the highest amount of 'hits' or engorged by faceless trolls and their bots.

In this context, the overriding problem for Data Loam was to see if we could rethink search engine codings in such a way that the exponential explosion of data would be a 'good problem'. Could we create a system that, rather than trying to dampen down this exponential proliferation, required it. Rather than attempting to straightjacket / cut-down information into tiny packages of manufactured truth-bits, might there be some other way to work with, rather than against, this contemporary explosion of information? What we came to realise was that by our decision to go with the (multi-directional, infinite) flow, a completely different understanding, method, and eventually also, cataloguing and retrieval system framing different fields of knowledge, new and old, was possible and desirable.

At one level, this was nothing less than a holistic, discursive approach, one without distillative categories or a homogeneous, overarching set of definitions. Not only was this crucial, because the old systems were collapsing under a tsunami of information, but also because the process of information retrieval, circulation and exchange no longer

simply ‘belonged’ only to humans. More often than not, it was now a distributive affair, proliferating via machine learning, and operating beyond the threshold of perception and linear temporality. Future knowledge systems could, depending on certain functional processes, not only infinitely expand but also, and importantly, self-organise whilst simultaneously circulate, plateau, dissolve or morph.

Instead of getting lost in the concepts of the post-human, data mining and some loose understanding of ‘the network’, Data Loam favoured a more practical move. This entailed shifting the focus away from the so-called hard sciences towards art, art making and the open ended propositions entrenched in the world of ‘making’. This was in part because we wished to maintain and indeed privilege the role of curiosity, wonderment, and the logics of sense, where series, recursivities, fractals, slices of intensity, colour, tone, energy, movement were crucial to the meaning and magic of the everyday.

What unfolds in this book, then, is a more detailed love affair with knowledge and intelligence, meaning and making, one that is intimately acquainted with the digital, the artificial and the wild proliferation of data. It is not just a fabulous romp with art and its technologies, new and old (though it is at least that). In retrieving and highlighting sensuous making, particularly in tandem with (and as an expression of, though sometimes quite distanced from) digital systems, autonomous, machinic, internet or otherwise—a whole new chapter re-focussing the Enlightenment away from its 18th century moorings around reason and the rise of the individual and relocated into the 21st around distributed intelligence and the proliferation of data—begins to surface. Profound methodological implications emerge, not only for political theory, philosophy, poetics, literature and contemporary art, but also for the heretofore separated knowledge systems of science, technology, engineering, each now enlivened by their ‘sticky cohesions’ with each other. To put this slightly differently: the loam—a residue sometimes hard, mostly soft—when expressed via the rampant acceleration of data proliferation, circulation and exchange, is a rather precious, albeit strange, entity. Vibrant and disruptive, flowing and yet at times steadfast, both segment and infinite plane, it names a kind of dynamic discourse, closer to that of a living, breathing, shape-shifting mesh. Its connections are self-organising complexities, which require the practical activities of distributed intelligences. We reclaim this as nothing less than art.

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