

DECOMPRESSION, MEMORY, EXTERIORITY  
A REFLECTION ON BENSUSAN'S *MEMORY*  
*ASSEMBLAGES*

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*Memory Assemblages (MA)* is, amongst other things, a generous, ambitious and innovative re-reading of Derridean deconstruction and some of its key terms including, prosthesis, supplementarity, messianicity, iterability, the trace. Indeed, through the lens of *addition* and *addends*—to my ears a riff on the Derridean *supplement*—*MA* offers an exceedingly rich account of its own conditions of possibility—that is, the conditions for the novel re-reading it enacts.

*MA* then re-writes and transforms Derrida, aspects of the grammatological project and of later works such as *Spectres of Marx* and *Marx and Sons* in a thoroughly contemporary way, fit for our times, our contemporary anxieties and anguishes, while engaging many philosophers working across philosophical traditional along the way, including recent work by Malabou, Meillassoux, and my own *Speculative Grammatology* (2021), which, in offering an account of the inherent plasticity of the trace structure, offers variations on some of the same themes.

I should caution that the following remarks, perhaps inevitably, privilege those areas of greatest proximity to my own version of this project of reconstructing an account of the mnesic trace in the wake of deconstruction. *MA* is full of theoretical insight and innovation in areas that are less proximate to my project of speculative grammatology, that equally draw our attention. Indeed, on a different day and in a different context, I would spend a lot more time on question of spectre/spectrality and speculation as they arise in *MA*.

With this caveat, I will focus this intervention on a few exegetical points related to the problem of retention and addition as they appear in *MA*, and I will offer a few critical points and questions, which I hope will add to the uptake and

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dissemination of the ideas in the *Memory Assemblages*. In particular, I will focus on the question of the *entanglement* of retention and recollection.

## PART I. COMPRESSION, DE-COMPRESSION, RETENTION

There is prize purse called the Hutter Prize<sup>1</sup> that rewards improved performance on the task of the compression-decompression of an English natural language file. The file is some substantial part of the English language *Wikipedia*.

Improved data compression and decompression, make data storage and processing more efficient. However, the motivation for the founders of the prize is not primarily efficiency gains or improved compute. Storing data in such a way that it is readily available for retrieval is an important problem for computing, but more enticing for the prize's founders is the speculation that intelligence just is doing this task very well. Thus, the thought goes, improvement on this task may lead to progress in AI and AGI.

Below, I reproduce (with some editorial liberties), a brief from the Prize's web page:<sup>2</sup>

Being able to compress well is closely related to intelligence... In order to compress data, one has to find regularities in them, which is intrinsically difficult (many researchers live from analyzing data and finding compact models that describe this data).

In the task of compression, then, it is presumably these regularities that are stored along with the rules for re-constituting the text (file).

Currently, compressors are 'dumb'—as evidenced by their relatively large size.

Compressors beating the current "dumb" compressors will be smart(er).

Since the prize wants to stimulate developing "universally" smart compressors, we need a "universal" corpus of data. Arguably the online encyclopedia Wikipedia is a good snapshot of the Human World Knowledge. So, the ultimate compressor of it should "understand" all human knowledge, i.e. be

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<sup>1</sup> <http://prize.hutter1.net/>

<sup>2</sup> Ibid.

really smart.

While intelligence is a slippery concept—so much these authors are willing to admit—file sizes offer us hard numbers and, as such, make for a useful proxy of intelligence. That is, file sizes offer something like an objective measure of the task.

“If you [addressees are potential participants] can compress the first 1GB of Wikipedia better than your predecessors, your (de)compressor likely has to be smart(er). The intention of this prize is to encourage development of intelligent compressors/programs as a path to AGI.”

I propose—though this is no small ask—that we bracket the philosophically shoddy and culturally and linguistically imperialistic assumptions about english-language Wikipedia offering a good snapshot of “Human World Knowledge.” Also, I propose that we bracket the provocative question of whether we would like to think of intelligence in such reductive terms.

I mention it here, because it proposes, however philosophically naïve, an illuminating account and illustration of the entanglement of retention (here, the compression of data) and retrieval (its decompression). Indeed, the name they propose for this entanglement is *intelligence*. On this picture, though, retention is *optimized* for potential retrieval. Regularities or patterns are stored in such a way that they can be most efficiently (with respect to storage and computing resources) reconstituted or retrieved—on command, or as needed.

If you will permit me a small digression, I will mention that, when reading about this prize—the first time, around the same time that I first read Derrida’s *Archive Fever*—and this time in light of *Memory Assemblages*, I wondered about the possibility of alternative, and, from the point of view of efficiency, more perverse “archive” prizes. For example, we might imagine the Sigmund Freud archive prize, one that awards “successful” compressions that nonetheless best resist attempts at their decompression. Or the James Joyce archival prize for the program that maximizes the size of the decompression file for any given English-language compression.

The utility or optimization function that the prize funders at least implicitly assume as the mark of any real intelligence, I think pretty clearly and

unacceptably constrains the ways to think of this relation between de/compression. You might say we require another decompression, one that does not think it in terms of some highly constrained, historically contingent, narrow memory assemblage (for example, one associated with WEIRD<sup>3</sup>, early 21<sup>st</sup> Century Human knowers). Still, I think we can draw some initial lessons about the general conditions of retention and retrieval from the example of the Hutter prize. Compression/archiving involves subtraction, or making smaller; isolating and then in some cases minimizing the differential units (infra-structures or infra-patterns in the data) required to both store and restore the “memory” at a future point. Of course, these differential units are not stored as such, they require a medium which is anything but a blank surface or pure exteriority. Consignment occurs in and requires a heterogeneous set of differences (in other words, a prior compression).

Decompression, on the other hand, is not only the re-expansion of what has been folded away, but something like it’s “re-in-corporealization,” re-adding (if we may speak this way) some flesh to the skeletal consignment. Both compression and decompression imply media, compression takes data patterns’ differential bits and enmeshes them into heterogeneous differential bits (presumably with a smaller footprint), and decompression reconstitutes these differences in heterogeneous con-texts or media.

Generalizing, the movement of de-compression assumes no originals and no obvious origins. Novel technological means (for archivization)—and perhaps we could understand *techné* entirely in terms of the pair retention-retrieval—transform processes of consignment (compression) and de-compression, and also, as Derrida notes, and as *MA* re-marks, the texts or traces which come to be consigned. This is a process that philosopher Colin Koopman helpfully refers to—in his book brilliant recent book *How We Became Our Data*—as *formatting*.<sup>4</sup>

Talking in terms of de-compression, I am proposing, emphasizes the entanglement at the center of *MA*. The way it is figured by the Sutter Prize,

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<sup>3</sup> The acronym WEIRD, in this context, stands for a knower that is Western, Educated, Industrialized, Rich, and Democratic societies. It comes from the observation that the overwhelming number of subjects in social science and psychology experiments fit this profile while attempting to formulate universalist theories.

<sup>4</sup> Koopman, Colin (2019). *How We Became Our Data: A Genealogy of the Informational Person*. Chicago, IL, USA: University of Chicago Press.

however, subordinates both retention and retrieval to principles of economic and material efficiency, rather than considering the latter as narrowly defined instances of a process of general archivization-retrieval, where the possibility of being indefinitely orphaned (“compressed”) persists along the aleatory possibilities of decompression—of being re-constituted or re-represented (decompressed). It seems to me, as well, that what the Sutter Prize description misses entirely is the importance of what Bensusan calls the spectral.

Let us read a bit from *MA* (page 107). The citation comes a bit after the beautiful Baudelaire quote from *Spleen* in *Fleurs du Mal*: “[a] giant chest of drawers, stuffed to the full; [w]ith balance sheets, love letters, lawsuits, verse; [r]omances, locks of hair rolled on the chest of drawers with hair rolled in receipts; hides fewer secrets than my sullen skull.”

In a memory assemblage, both what is placed in retention and what I retrieved are spectral. What is stored is orphan, incomplete, as nothing can fit in the archive in its full size—the world cannot fit on a useful map. No representation, if it acts as an archive, can hope for more than sufficiency; a representation is like a revenant, for what is in retention is beholden to the addends to come. Further, the addends that trigger and perform retrieval are themselves dehiscent; they depend on a coupling with what is in retention to act. They can neither prefigure what is in retention nor be prefigured by it – a memory assemblage is a hauntological coupling where both elements are spectral. What is placed in retention can return while what promotes retrieval can only stir up the stored past. This is why we cannot fully exorcise the capacity of memories to haunt; the past can only be buried in memory assembles. Like remembrances, specters are more insisting than existing; they are not permanent, and their intermittence depends on what the future conjures. The sense in which memories and spectres are immortal is not that of a continuity of life elsewhere or that of an eternal presence, but that of an endless possibility of return.”

Here we see that representations act as archives and archives produce or mobilize representations, the latter of which are nothing but vehicles for the revenant, beholden to that to which it is added, always inhabiting the garb, the mask, the body of that to which it is added.

On this picture both what is available for retention and for retrieval is unknowable—despite the depletion of what is retained. There is a surplus (the spectral) on both sides. Thus, we (and any given memory assemblage) always

archive more than we need or intend, or more aptly, there is more archived *in what we need or intend* than we could ever factor—and hence we cannot know or prefigure what can or will be decompressed—what we are stirring or what stirs when we stir the pot.

## PART 2: WHAT IS COMING

Derrida's *Of Grammatology (OG)* was haunted by the spectre of what was already coming—what was already re-writing writing. Namely, the long-durée event referred to in the chapter title “The end of the book and the beginning of writing”—or what Stiegler called textual digitization and re-grammatization.<sup>5</sup>

*OG* raises the spectre of additive [prosthetic] processes undoing and re-organizing the meta-stability (in Simondon's sense) of the very memory assemblages which gave rise to the text we are reading, and which gave rise to all other philosophies of the Book *via* novel forms of consignment or archivization.

“Natural” language (and here I include both spoken and written) is and has been the technical or prosthetic medium of de-compression for human memory processes—it is an epiphylogenetic medium intimately entangled with and yet ‘exterior’ to organic forms of memory. Language is the “tool” and *techné* that invented the human as such—such is the perspective that Derrida adopts in *Of Grammatology*, following Leroi-Gourhan. It is the “original” prosthesis and technicity of memory and the human, a formula that we also see adopted by Stiegler in his grammatologically inspired *Technics and Time* series.

I would add, today, sharing a certain Vygotsky-ian perspective, that it is useful at least provisionally to distinguish the specificity of language as a *psychological* tool from general prosthesis

“The first use of a sign signif[ies] going beyond the limits of the organic system of activity which exists for each mental function. The use of auxiliary devices, the transition to mediated activity radically reconstructs the whole mental operation just as the [use of the] tool modifies the natural activity of the organs, and it broadens immeasurably the system of activity of mental functions.” (Vygotsky,

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<sup>5</sup> Stiegler, Bernard. “The Digital, Education, and Cosmopolitanism.” *Representations*, no. 134 (2016): 157–64. <https://www.jstor.org/stable/26420557>.

1997a, p. 63)

For Vygotsky, *language qua psychological* tool motivates epi-phylogenesis. Human cognitive genesis is thus a process of “enculturation” where the interiorization of social-semiotic activity constitutes the functional reorganization of cognitive capacities.

In *Memory Assemblages*, Bensusan writes—in one of the many moments that I found absolutely stunning—that *this* historically determined use of language (linguistic signs) as a supplement for organic memory retrieval may be an art in decline. In *MA*, Bensusan, quoting the novel *There There* (by Thomas Orange), writes:

there is no reason to remember when it's just right there, like the way everyone used to know phone numbers by heart and now can't even remember their own. As a consequence, the very act of remembering, of organic retrieval is *becoming old fashioned* (35).

This does not imply, of course, that there is no more remembering and retrieval, but that we are living, perhaps, an epochal transformation of the prior memory assemblage—the one giving rise to the Human of the humanists. One that is transforming the way that information is accessed, stored and retrieved, and by which agencies, (still to come). Here we are, again returning to the scene of writing in Plato's *Phaedrus*—and if we mourn this transformation, it is perhaps, like the Egyptian God Theuth in Socrates' story, because we overvalue proximity to organic retrieval.

Of course, what counts as “interiority” and what counts as “exteriority” with respect to any particular assemblage is precisely troubled—not only in philosophically contemporary accounts of “extended mind and cognition” (Chalmers and Clark, but in the earlier deconstructive accounts of technicity and prosthesis, which offer quite different logic of addition from the one we just associated with retention and retrieval.

There we saw that in retrieving what has been consigned, we must reproduce, recreate or rewrite in a new context or media a heterogeneous “text” of differential units or traces. As we saw, this general condition for both any consignment and any retrieval—mobile or modifiable sets of differential units

(bits or letters)—ensures that every retrieval implies both “exteriority” and “addition.” But this “exteriority” necessarily remains within another sort of interiority or enclosure—that of generalized text and textuality.

*Il n’y a pas de hors-texte.*

That is, nothing outside of the movements of consignment and retrieval, *and* as Bensusan brings to the fore, nothing outside the memory assemblages that allow us to situate and contextualize these processes. These assemblages too, however, must be understood in terms of the logic of addition, of the movements and relays of retention and retrieval. This is why we can only speak of the *metastability* of these memory assemblages. Their transformation involves the addition and plastic incorporation of new forms of memory

I will conclude these brief remark by noting that whatever *exteriority* is represented by Bensusan’s account of addition/prosthesis and supplementarity seems to me to sit quite in tension with the sort of “outside” or “exteriority” that we commonly associate with the brute contingency of accidents, annihilating force-energia (ἐνέργεια), the singular event, loss, absolute erasure, and any sort of pure futurity unencumbered by the past. In the former, exteriority is always thought in terms of the revenant or return rather than the unaccountable as such. What comes is also and always what returns, what is signaled, stored and retrieved from the past (albeit not according to the logic of pre-formatism or historicism). This, Walter Benjamin affirms when he affirms the contingency of the historian’s retrieval—at least the historian that is capable of fanning the sparks of hope from the past. The revolutionary historian restores what is left for us inheritors.

I am not sure, but it seems to me that in Bensusan’s account of addition there is an appeal to the other form of exteriority—the exteriority of the radically other—that is nonetheless undercut by his account. I think he shares this problem with Derrida, a reference to a greater, bigger outside that is also capable of destroying the conditions for the generalized or ubiquitous mnemonic activity that he otherwise so innovatively explores in *Memory Assemblages*.