

What An Invested Object Might Contain

*on distance and memory • **memory is embodied** • neurons and scents
• **memory is reflexive** • a return to the autopoietic • **memory is cultural** • de Waal's netsuke • **memory belongs to artists** • lichen
you again • **kinds of memory** • mystical, documentary, fragmentary, hallucinatory, Nora's four types, public and private • **Proust** • the truth
about where I started • Proust v. the cyberneticists • **stereoscopic memory** • optics and errors • depth in time • optical relations:
cinematic, montage, stereoscopic • **the moment of inflection** • instantanés, moments bienhereux, and inflection • an initial test*

The primary characteristics of the investable object itself have been sketched. But what should be *invested into* the object? Whether or not people make the physical container themselves, whether or not the object is reflexive, there must be personal content, communication, emotion, and it must come from the object's owner. But how do we begin to talk about content without slipping again into the common construction of information as unmoored entity?

Sara Hendren, in a short reflection on Ted Porter's *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life* posted to her blog quotes Porter:

Vernacular languages are also available for communication.
What is special about the language of quantity?

My summary answer to this crucial question is that **quantification is a technology of distance.** (emphasis Hendren's)

and then provides a response that is perhaps the barest statement of the problem at the heart of this paper:

That last phrase has been especially provocative for me lately: It states at once the convenience of numerical descriptions (percentages, pie charts, ratios) and the immediacy of their appeal. I think it also suggests why artists tend to object to these descriptions of the world and to the comfortable assurance that this kind of “objectivity” will be respected, cited, trusted. Artists so often traffic in drawing close attention, in careful notice, in celebrating outliers and the unexpected. So it can seem like the posture of mathematical purity — in all its applied forms of social and political organization — is so much a technology of distance that it overlooks the subtlety and depth of human experience.

Can the content invested our object work against this technology of distance? Can we have a technology of outliers or a technology that foregrounds “the subtlety and depth of human experience”?

In his information hagiography, Gleick includes a description of the radicalism of telegraph:

The most fundamental concepts were now in play as a consequence of instantaneous communication between widely separated points. Cultural observers began to say that the

telegraph was “annihilating” time and space. ... This was an exaggeration that soon became a cliché. The telegraph did seem to vitiate or curtail time in one specific sense: time as an obstacle or encumbrance to human intercourse. (148)

I find a significant amount of inspiration here. If the telegraph, a technology of distance, is also able to become a technology of closeness through what it communicates and who it communicates for, the invested object, too, should be able to transmute distance-creating logics into close and subtle communications. For this what we choose to communicate and to whom because an even larger question.

Höök et al., in their work on interactional empowerment, choose to speak of emotion, using a term already grounded in subjectivity and generally accepted to be contextual, and in particular the emotion generated by interactions with games and other stimuli. Coming from a scientific perspective, this is enough — the researchers are looking for emotional-expressive tools as part of an investigation into a particular set of hypotheses around design.

In the case of attempts to pollute the possible, however, it would be ideal to develop a tool that can be used in a broader context, with a stimulus that is common but ambiguous, vast in its experience and interpretation, and near to our hearts. I should be known already as a continuous phenomenon, emotional, specific, embodied, a target for communication throughout human existence. For this, I choose memory. As Walter Benjamin writes in his essay on Proust, “An experienced event is finite — at any rate confined to one sphere of experience; a remembered event is infinite, because it is only a key to everything that has happened before and after it.” (Benjamin 202)

Memory is arguably what makes us ourselves: it is our experiences that shape our ongoing interpretation of ongoing phenomena. That is, we understand the present in relation to the past and what we remember of the past in this way determines who we are. It already collapses time and temporal distance and with it we communicate with ourselves.

Memory is embodied.

Memory is embodied in multiple ways: we can only remember the places where we have been, physically or psychically; as we remember, we reconfigure actual synapses in our physical brain; we can be spurred to remember through our body, in particular via olfactory stimulus.

Memory is bound by the limitations of being a creature with a body. We may imagine or project ourselves somewhere far away, somewhere different or better. But we will not *remember* it. We remember what has happened to us (even if we may shape it with strategic forgettings sometimes.)

Memory is also embodied in a more literal way. As Jonah Lehrer charts in *Proust Was a Neuroscientist*, memories persist in our minds through the life and death of neurons, just under the surface, through the changes wrought by particular prions.(Lehrer 76–78)

This physicality may be why, as anyone who ever quoted Proust or typed the word *madeleine* will tell you, memories may be summoned by our senses — sounds and smells and tastes. Psychologist Rachel Herz and other memory researchers have shown that olfactory-induced memory real and powerful. As Herz reports:

Descriptive autobiographical memory studies have shown that odor-evoked memories are highly emotional as measured by self-report. Several cross-modal laboratory experiments have further demonstrated that memories associated to odors are more emotional than memories associated to cues perceived through other modalities (vision, tactile, verbal) ... (217)

She has even charted the geographic and density-related variations in the resonance of particular smells: “for memory vividness, participants who lived in the city had the most vivid memories to popcorn and people who lived in rural/country areas had most vivid memories to fresh-cut-grass.” (Herz 220–21)

Memory is physically situated and effected; it is bodies inside and out.

Memory is reflexive.

Memory is also deeply reflexive. It may be the canonical example of a system wherein the observer changes the observed and the observed changes the observer. In reflecting on our reflections, we are able to see the development of self-consciousness and identity in an autopoietic organism. This action can be described as a palimpsest, with each cycle adding layers, generating complex meaning, much like Proust’s drafts of *A la recherche du temps perdu* themselves; this action can be a bricolage, cited by Turkle as the practice that inspired her work in material culture — in her case literally as the search for her father’s memories in an assemblage of objects (Turkle, *Objects* 5).

[[Turkle quote / expansion here?]]

As Maturana and Varela write in *Autopoiesis and cognition: The realization of the living*,

An autopoietic machine is a machine organized (defined as a unity) as a network of processes of production (transformation and destruction) of components which: (i) through their interactions and transformations continuously regenerate and realize the network of processes (relations) that produced them; and (ii) constitute it (the machine) as a concrete unity in space in which they (the components) exist by specifying the topological domain of its realization as such a network. (78–79)

When we consider the embodiment of memory, we can see that the process of memory is indeed a process of “production (transformation and destruction) of components” — these components being both neurons and thoughts about who we are — and they do “continuously regenerate and realize the network of processes (relations) that produced them,” that is, ourselves. In this case, the topological domain is the connections between the network of individual moments.

The instantiation of reflexive memory in this project in particular will be discussed later in this section.

Memory is cultural.

Memory, social and personal, is known to live within objects. When it takes up residence in the physical, memory becomes cultural. We have seen how this works in terms of material culture history in sections II and III, where we considered Manuel Charpy’s elucidation of the gestural

constraints and communications of Victorian objects and John Style's investigation into the emotional of London Foundling Hospital tokens.

Maurice Halbwachs, in "Space and the Collective Memory," depicts the same cultural communication through personal imagination as opposed to professional history:

In an antique shop, the various eras and classes of a society come face to face in the scattered assortment of household belongings. One naturally wonders who would have owned such an armchair, tapestry, dishes or other necessities. Simultaneously (it is basically the same thing), one thinks about the world recognizable in all this, as if the style of furniture, the manner of decor and arrangement, were some language to be interpreted. The picture a Balzac provides of a family lodging or the home of a miser, a Dickens gives of the study of a notary public, already suggests the social type or category of the humans who live in that framework. What is involved is no mere harmony and physical congruence between place and person. Rather, each object appropriately placed in the whole recalls a way of life common to many men. To analyze its various facets is like dissecting a thought compounded of the contributions of many groups. (47-48)

In this way, memory as content doesn't have to doom our project to solipsism or isolation. The specifics of a single system or framework may be personal and in the interests of privacy they may be limited to complete interpretation in the mind of the user, but they are also always somewhat typical of our type and open to imaginative interpretation by others.

Edmund de Waal's story in *The Hare With Amber Eyes* is a compelling example of this principle. In charting the travels of a collection of *netsuke* that has been in his family since the nineteenth century, de Waal is able to spin us the story of increasing contact between France and Japan and the craze for *Japonisme* in nineteenth-century Paris, as filtered through newly wealthy Odessan Jews.

The collection begins just at the moment to which Charpy was referring when he considered the mania for collections “as forms of possessive individualism”: “Collecting objects implied using one’s knowledge but also reorganizing the world around oneself.” (Charpy 210)

The *netsuke* move through the geography and upheavals of the twentieth century, through rarefied spheres and rubble, alternately inhabiting dressing rooms, hiding spots, and places of pride. But it is not the facts of their adventures that make the *netsuke* potent. It is the memories they were present for — the worlds they organize around themselves — and the imaginations with which de Waal surrounds them.

For me, it was this book that began to make this project feel possible and true.

Memory belongs to artists.

Finally, memory is the domain of the artist. If the engineers have given us the tools to digitally augment our capabilities along with the sickness of information, the artist has access to “a body of theory that has considered memory’s intersection with the imagination and the aesthetic,” (Farr 18) and thereby the materials for a thoughtful salve.

By availing ourselves of the artistic, we open a conduit for those specific, subtle, close technologies tightly-hewed abstraction has removed. When Gleick recounts the cleavage between the oral and the written that he deems necessary for technological progress, he contrasts it to earlier oral works, which is to say, poetry.

Logic takes its form in chains: sequences whose members connect to one another. Conclusions follow from premises. These require a degree of constancy. They have no power unless people can examine and evaluate them. In contrast, an oral narrative proceeds by accretion, the words passing by in a line of parade past the viewing stand, briefly present and then gone, interacting with one another via memory and association. (Gleick 38)

Which brings us back to the lichen metaphor for the invested object. Memory is that artistic, atavistic, extra-logical algae to smuggle back in.

More practically, too, the art world has already lived through the return of an embodied memory. Ian Farr explains:

If, from the end of the 1950s onwards, a spectre haunted modernism, decade by decade weighing down on its structures until they collapsed into noble but now incoherent fragments, it was the spectre of memory.... The liberation from tradition and historical contingency, the presentness yet simultaneously abstracted remoteness considered central to mid-century modernism's aesthetic aspiration was assailed by the return of what it had seemingly repressed.

This return took the form of postmodern approaches to memory or, as he writes, “to be marginally less imprecise, strands of artistic practice increasingly inflected by remembrance and forgetting.” (Farr 13)

Kinds of Memory

But let’s step away from lyricality for a moment and to add a little more precision to our questions; to create a pollution-worthy prototype we must be able to state our aims a little more straightforwardly, art or not. First we must consider what we are actually discussing.

Memory can be described in a multiplicity that suits its purpose but can sometimes bedevil ours.

It can be the Bergsonian cone interacting with the plane of experience. In this view, memory is the intersection of the individual with the plane of history. This nearly mystical definition suits Bergson’s philosophy, described by Lehrer as a refusal of the mechanization of human thought and insistence on the wonder of human consciousness. (Lehrer 66)

In contrast, memory can be documentary — the memory that exists frozen within a photograph — as with the work of Miroslav Tichy (Farr 12) or the interpretations of Gleick (376, quoted in §2).

It can be the antithesis to this documentation, as Siegfried Kracauer posits in “Memory Images,” unable to completely contain memory or be made sense of by memory. “Memory is neither the entire spatial appearance of a state of affairs nor its entire temporal course,” and so,

Since what is significant is not reducible to either merely spatial or merely temporal terms, memory images are at odds with photographic representations. From the latter's perspective, memory images appear to be fragments — but only because photography does not encompass the meaning to which they refer and in relation to which they cease to be fragments. Similarly from the perspective of memory, photography appears as a jumble that consists partly of garbage. (Kracauer 46)

Memory can also be the hallucinatory surrealist manifestations, for instance, in Andre Breton's *Nadja*. As Farr writes, connecting the work of Sartre and Breton via Paul Ricoeur,

Whether the trigger is a familiar landmark on an everyday walk suddenly made strange by a change incident of light or shadow, or a curious object or person emerging into vision for the first time, the *état d'attente* (state of expectation) of the surrealist viewer is a mode of being that allows an opens up to this semi-hallucinatory pathway in a process of memory-association. (14)

It can be a property moving from the realms of the cultural to the archival, as suggested by Pierre Nora, who locates true, or traditional, memory in the “spontaneous, social and all-embracing” French conception of a remembrance rooted in a place, and contrasts it with three modern versions of memory.

The first is archival memory, which “relies entirely on the specificity of the trace, the materiality of the vestige, the concreteness of the recording, the

visibility of the image.” (62) This is the memory of historians, memory circumscribed by logic, where what is true is what is precise. It is also selective.

This is followed by the much-less-selective memory as individual duty, the memory that creates contents to be archived, with each of us a memoirist.

Nowadays who does not feel called upon to record his reminisces or write his memoirs? Everyone has gotten into the act: not just people whose roles in history was minor at best, but also the relatives of such people and their doctors and lawyers and anyone else who happens to be standing about. The less extraordinary the testimony, the more aptly it is taken to illustrate the average mentality. ... Within a single generation the imaginary museum of memory has expanded beyond belief. (Nora 63)

The final type of memory to be considered, “alienated memory,” is a modern sort, the result of our discontinuity with true memory, wherein we scramble to recreate the past, to understand the lost country from which we are irreparably separated. (Nora 64–66) Nora reports these developments with a sense of a loss and an eye on the absurdity of our attempts to prevent any trace from being lost — again nearly burying us in the garbage Kracauer finds in photographs.

Memory can also be plotted along the axis from private to public, or as I like to think of it, from Proust to Perec. In discussing the second type of memory, individual, Nora ties Proust (along with Freud) to the shift of memory into the psychological, “from the social to the individual, from the concrete message to its subjective representation from repetition to

remembrance.” The result? “Memory becomes a private affair.” (64) (We do not need to agree with the entire theory, and I do not, to see the resonance of the description.)

In Proust, memory is intensely personal. Though it bears up its global truths through the repetition of motifs and phrases, and tells us it will from the moment Swann’s little phrase is introduced in *Swann’s Way*, it can do so only through the means of the narrator’s careful reporting on the events of his life.

Perec works with memories that are public, nearly dispassionate, but still need to be “provoked, rescued from oblivion.” This he does by enumerating observations in a public place, as in *Attempt to Exhaust a Parisian Space*, or by enumerating memories themselves as with *Je Me Souviens*. The memories Perec is interested in are of a particular sort as well, “memories which truly render the ‘tissu du quotidien’ (fabric of everyday) — a body of experience that transcends our own individuality and yet invokes a commonality of experience.” These “cannot be purely personal (what happened to me) or factual (what happened to be the case).” (Sheringham 88)

And yet, though we can oppose Proust and Perec in denotative terms: long, winding sentences entwined around *I* versus short, dispassionate lists on TV stars and the number of cars in the street, both work to draw information out of the aether and root it again in the particular.

Proust

Up to now, absent the overview of the introduction, this paper has been working from outside in, in a reversal of the discoveries that brought me

to this project. Nearly a year before the watcher objects caught my eye, I found my way to *A la recherche du temps perdu*, and as happened for scads of Proust fans before me, the work caught my heart. In all of its inconsistencies, rambling philosophies, and hallucinatorily evocative moments, *A la recherche* described a reality that was far more real, specific, subtle and true than any chart-based insights watcher objects might promise. It was even more vivid the hallucinations of *Nadja*, which I recall stumbling through in college.

What began as pleasure in his recognition and articulation of the pleasures of reading, especially through long childhood afternoons, or of the beach, became a view that was able to stand up to the depredations of shorn information. Here, in *Swann's Way* was the narrator depicting specific, lived memory giving vigor to such abstract categories as lilacs, hawthorne, tadpoles and buttercups. (188) There, in *In the Shadow of Young Girls in Flower* was Marcel painting a milkmaid as a concrete embodiment of abstractions like beauty and happiness (234–235) in firm rebuke to the ideas haunting information. Everywhere in the novel memory is encountered, re-encountered, revised and re-experienced.

Just like computing.

Choosing memory as the algal substance to be invested in our technological fungus becomes suddenly obvious. Computers are a technology of memory. In *The Information* Gleick suggests Babbage's ideas really became different when they addressed carrying values from one column to another: a work of memory. (101) Computers become faster and powerful because they can remember more better. Computers are positioned as better than humans because their memories are less faulty.

Sometimes we fight back by suggesting that data, information, memory and knowledge are different substances. This may be true but is a difficult way to pollute the possible of computing. Instead, we can slip a different sort of memory into system we already have, add it on top of the strict abstract electric memory.

The right type of memory on which to focus is the memory that haunts *A La Recherche*. But how does it work?

Stereoscopic Memory

In *Proust's Binoculars*, renowned Proust scholar Roger Shattuck analyzes his version of memory in terms of time and optical metaphors.

Right away, Shattuck ties optics to error in the novel and outlines how it undermines the notion of a photographic truth.

Regarding a paragraph in which the narrator has “[learned] that M. de Norpois, who has always appeared to have a benevolent attitude toward him has called him ‘a semi-hysterical flatterer,’” Shattuck cites all the optical and photographic terms contained — “*milieu, propage* (propagates), *réfraction, image, épreuve* (proof), *photographie, radiographie, tirées* (taken, drawn out, printed)” — and then continues:

I should like to insist here that [the excerpted passage’s] underlying theme of the inaccuracy of perception furnishes us with the first clue to the significance of all this optical imagery. The science of optics forever shows the *errors* of our vision, the distortion from accuracy, deviations from the straight line. Photographic precision is only an accepted version of

deformation. ...

Marcel's comedy of errors continues until he and we begin to understand that art itself is an optic, but a superior optic which will finally transform error into truth for our mortal eyes. (13, 17–19)

At the same moment technological claims for logical truth are being promulgated by Russell, Proust is already reminding readers of its artifice and unsuitability, at least as a single captured "*instantané* (still or snapshot)".

Though it remains the basic unit of observation and memory, the single *instantané* turns out to be an orphan, a meaningless fragment snatched out of the flux. The still camera must yield to other optical devices to provide metaphors for our pursuit of reality: the magic lantern, the kaleidoscope, the cinematograph. All three depend upon a succession of images and describe the fly by reproducing it in a schematic form. They reflect time by partially submitting to its ceaseless modifications. (Shattuck 19, 23)

Unmoored information "snatched out of the flux" is meaningless. But if we take a different approach and use time instead of just annihilating it, we can approach reality. We can find depth.

"Depth, or what is called in optics penetration effect, cannot be found in a single image, a single *instantané*," Shattuck tells us — instead it must be produced stereoscopically, by layering images so our binocular vision can remake them in their full three dimensions. Taking up memory,

Proust undertakes a transposition of spatial vision into a new faculty. The accumulation of optical figures in *A la recherche* gradually removes our depth perception from space and re-erects it time. (42–43)

Proust is constructing a topology of time. In the final volume of *A la recherche*, when Marcel confronts the figures from his past once more, now aged and changed from their previous selves, it is clear that “Proust set about to make us see time” (46) through his inaccurate optical memories — and succeeds when they are gathered.

Memory, in its alternate form of recognition, progressively sets one image beside other chronologically separated images and sees in them not change ..., not *trompe l'oeil*, but revelation of true identity, the “optical view.” ... Multiplicity now brings not confusion but dimensionality and depth. ... Merely to remember something is meaningless unless the remembered image is combined with a moment in the present affording a view of the same object or objects. (47)

Instants are arranged by kind, like the oral narratives Gleick was so happy to escape, only now in their context they provide the depth of understanding required to see life truthfully.

Shattuck outlines three principles for generating deep from *insantanés*: the cinematographic, the montage, and the stereoscopic.

The first “employs a sequence of separately insignificant differences to produce the effect of motion or animation.... This is the simplest and most

familiar of the the three principles for it appears to conform to the continuity of normal experience.”

The second “rejects the accumulation of small differences [that is characteristic of the first] for the exploitation of larger associative or dissociative leaps that suggest the meaning of a scene or situation by contrast.”

The third, the stereoscopic,

abandons the portrayal of motion in order to establish a form of arrest which resists time. It selects a few images or impressions sufficiently different from one another not to give the effect of continuous motion, and sufficiently related to be linked in a discernible pattern. This stereoscopic principle allows our binocular (or multi-ocular) vision of mind to hold contradictory aspects of things in the steady perspective of recognition, of relief in time. (Shattuck 49–51)

What a perfect version of memory to invest into our object. It is autopoeitic, arraying the network of memories that constitute and give rise to our consciousness in the topology of time. This construction is suited to the discrete data technology was built for but only works in terms of private juxtaposition. In my invested object, I would gather what I would call *moments of inflection*.

The Moment of Inflection

I chose the term *inflection* over *instantanés*, *moments bienhereux* of even moments of recognition, because these moments, while somewhat more

than an *instanté* in their readiness for layering are still rather less than a *moment bienhereux*. While drawing on Proust's work heavily, they are still slightly different.

For, "If an image or sensation out of the past,"

is to be truly recognized, in the Proustian sense and not merely recollected, it must be summoned back by a related experience in the present and after a period of absence. (63)

This recognition itself differs from the *moments bienhereux*, Shattuck writes: "What distinguished all these recognitions ... from the *moments bienhereux* is that the recognitions contain an active participation of the mind, a conscious resolve" In this way, they last and give insight. By contrast, "The perpetually elusive pleasure of the *_moments bienhereux_*" may give rise to semi-permanent realizations, but are ultimately raw and ungraspable.

The moments of inflection ought to be *moments bienhereux* saved and filed away for active intellectual engagement at a later time. They are less incomplete, because we put them away, but do not have the force alone of a moment of recognition. Given their close relation to *moments bienhereux*, it is perhaps worthwhile to consider the structure of the latter before moving on to §5 and the genesis of the Oublié/trouvé project.

Each of these *moments bienhereux* [that Shattuck has identified and described in a set of tables] follows or partially follows a uniform pattern. ... First, Marcel is always in a dispirited state of mind — bored, usually tired, alone (or if not, annoyed by the presence of others interfering with his

solitude), and deeply entangled in the *train-train* of habitual living. Second, he experiences a physical sensation, which comes unexpectedly and by chance through any one of his senses or a complex of them. Third the sensation is accompanied by a clear feeling of pleasure and happiness These three components, which occur together in the present, combine in the fourth step to lift Marcel steeply out of the present and raise him high enough to see what he has lost sight of: an analogous and forgotten event in the past. (Shattuck 69)

(This is followed sometimes by a fifth step that can only exist in literature: a premonition of the future.)

Looking at this pattern, we begin to have an idea of the situations the object would appear in as well as the information it might hold.

While I already had noticed in myself a predilection for something similar to *moments bienhereux* — moments of intense recollection and the sensation of tying to other moments in rapid succession, I decided to test my project idea by spending a few weeks collecting the moments in a paper notebook — before any tech was added. It was a great success.

Like Marcel, these moments tended to come when I was alone, often when I was on the subway or walking around — the times when I was not reading my phone but instead let my mind wander. While the experiment proved I was in fact in a good place to use an invested object of the sort I imagined, I was mostly surprised by the pleasure of the work. Looking closely, finding the threads and knowing they weren't doomed to partial or total loss but available for sustained engagement felt good. The world

seemed brighter; colors were more intense — all of those glorious cliches of pleasure.

This was a good idea.

edited by Westley Hennigh-Palermo