A paper on archiving machines has to start with a Freudian impression - the subtitle of Jacques Derrida’s *Archive Fever*. Derrida distinguishes three forms of impression. The first Freudian impression is an inscription (Niederschrift), such as Freud’s own *Notiz über den ‘Wunderblock’*, handwritten in 1924, printed in 1925, and translated in 1940 as ‘A Note upon the “Mystic Writing Pad”’, reactivated in 2000 by artist Arnold Dreyblatt in his installation ‘The Wunderblock’ (Freud quoted in Draaisma, 7-9; Dreyblatt).

This first Freudian impression evokes a second one. With his *Note*, Freud made an impression – he continues to make an impression – ‘on anyone, after him, who speaks of him or speaks to him’, among them Derrida who carried Freud’s discussion on the mystic pad further. Arnold Dreyblatt, too, showed with *his Wunderblock* and other installations how he is impressed by Freud, while at the same time making new Freudian impressions.
The modern mystic writing pad – and a true archiving machine – is a keyboardless tablet PC or PDA. We write with a stylus on its surface (the screen). The writing leaves no mark on the substrate; it looks – to use the poetic expression that the Flemish philosopher Ann van Sevenant adopted from Plato – like writing with water (Van Sevenant). The stylus does not penetrate ‘the virginity of the receiving substance’ (Derrida 1978, 251).

Can we still call such writing on a PDA handwriting? Was it our hand? To what extent is the hand that held the stylus identifiable? Writing with a stylus on a tablet PC or PDA produces, in some applications, handwriting just as if the screen were a piece of paper marked by a pen or a pencil. Such handwriting can subsequently be reproduced from the machine’s memory, but only because the impressions on the screen have been translated by software into bits, which the machine can ‘read’, store, retrieve and re-translate into handwriting. The immediacy of writing on a screen is an illusion, as is its corporeality. Does this render the tablet PC and the PDA useless as a modern mystic writing pad, as prosthesis of live memory?

The issue here is not so much that digital writing and storage are metaphors for human memory, but that (hand)writing can be seen as a means of archiving. Derrida’s main question with regard to memory is how the psychic apparatus is: affected differently by all the technical mechanisms for archivization and for reproduction, for prostheses of so-called live memory, for simulacrum of living things which already are, and will increasingly be more refined, complicated, powerful than the ‘mystic pad’ (microcomputing, electronization, computerization, etc.)? (Derrida 1996, 15)

The metaphor of writing haunts European discourse (Derrida 1978, 197). Writing, Schreiben, schrijven are ambiguous words, referring to both the process and the product. The process is defined in the Concise Oxford Dictionary as marking ‘paper or some other surface by means of a pen, pencil, etc. with symbols, letters, or words.’ The product of such writing is ‘that which is in a written state or form’, ‘a group or sequence of letters or symbols’.2

In German and Dutch the double meaning is even stronger: man schreibt ein Schreiben, men schrijft een schrijven: one writes a writ (a written formal document). The German and Dutch verb and noun schreiben, schrijven come from the Latin scribere (as do the English scribe and scrivener).3

The distinction between writing as a process and writing as a product has an interesting parallel in the distinction between archive as a process and archive as a product. The archive-product, as we will see, is reconstructible by means of the archive process. Before we can assess the extent to which handwriting is equivalent to writing on, in, or with archiving machines, we have to understand the recovering features of the archive process.
The Archive

What is the archive? Is it ‘only a notion, an impression’? Whereas most English and French archivists always use the plural ‘archives’, scholars outside the archival profession have started to use the singular: the archive. For most anthropologists, sociologists, philosophers, cultural and literary theorists the archive is the Foucauldian archive: ‘the general system of the formation and transformation of statements’ (Foucault, 145-146).

In archivists’ terminology, in German and Dutch, het archief/das Archiv (singular) is used both for the institution and the building that houses the archives (plural). This corresponds with the origin of the word ‘archive’, coming from the Greek archéion: ‘the residence of the magistrates, the archons, the place where official documents are filed’ (Derrida 1996, 2).

Today’s archéion is an archive(s) like the National Archives, an institution that manages and preserves archives. Archives, the totality of documents, are defined in archival terminology as recorded information, regardless of form or medium, created, received, and maintained as evidence by an agency, institution, organization or individual in pursuance of legal obligations or in the transaction of business (Walne). The qualification is important ‘regardless of form or medium’, indicating that neither the mode of inscription (handwritten or typewritten, painted or printed) nor the carrier (clay tablet, parchment, paper) are essential. The archival bond is essential, which binds the documents to the context of their creation.

Dynamic Archiving

Archivists and historians use archives as sources, yielding documentary evidence about the past. Moreover, good archivists and historians have always studied not just what is said, but how the message is expressed: the language, the medium, the technology of production, the genre of the document, the historical circumstances and the context of writing (who the author is, who the intended audience is). (Heald, 93)

Disciplines other than history have also discovered the archives. Anthropologist Ann Stoler explains that the ‘archival turn’ in anthropology is leading her and her colleagues to critically reflect on the making of documents and how we choose to use them, on archives not as sites of knowledge retrieval but knowledge production, as monuments of states as well as sites of state ethnography. This is not a rejection of colonial archives as sources of the past. Rather, it signals a more sustained engagement with those archives as cultural artifacts of fact production, of taxonomies in the making, and of disparate notions of what made up colonial authority. (Stoler ‘Colonial Archives and the Arts of Governance’, 90-91; Stoler ‘On the Content in the Form’, 85)4

Scholars in other disciplines too, are looking up from the archival document and through the archive, looking beyond – and questioning – its boundaries (Blouin and Rosenberg). In doing so, the focus shifts from the actual archival document to its functional process or context of creation (Yakel); from the archive as a product to archive as a process; from the physical artifact to the ‘very act and deed’ which first caused that artifact to be created (Taylor); shifting the emphasis from the analysis of the properties and characteristics of individual documents to an analysis of the functions, processes, and transactions which cause documents to be created (Cook, 47).

In this new approach, an archive and archiving are much more than the storage of a document (Webster’s: ‘to file or collect as records or documents in or as if in an archive’). Archiving encompasses all the activities from the capture of documents into the system, to their management, use, and disposal. Archiving implies interactions, interventions, interrogations, and interpretations by creator, user, and archivist; these are activations that co-determine the archive’s meaning (Ketelaar 2001).

This implies that the archive is not static, but a dynamic process (Ernst 2002, 138-139). Quite appropriately, a recent German collection of essays is entitled Archivprozesse. Die Kommunikation der Aufbewahrung [Archival processes. The communication of storage]. Jürgen Fohrmann, in the collection introduction, explains that the archive should be seen as a dynamic process:

If everything that originates from the archive, is modeled by the work of the user, then again put into the archive, to be activated over again etc. – then the archive is not only to be understood as thesaurus, as place, as Wunderkammer, but as process. (Fohrmann, 22)

The archive product is also formed by the archive process because any use of the archive retrospectively affects all earlier instances of use, or, to put it differently: we can no longer read a text as our predecessors have read it (Ketelaar 2001). Let me give an example. The records created and used by German and Dutch agencies during World War II to account for the looting of Jewish assets, continued to be used, after the war, by German and Dutch agencies in the processes of restitution and reparation. The same record was activated again and again by different societal powers, for different purposes and for different audiences, as it continues to be activated today in the search for looted and lost works of art and other Holocaust assets. The looting and the registration of the looted property were, of course, an appalling event, but it was through the subsequent reemployment of the record that the primary registration really became a record of a traumatic experience. This is an application of Freud’s Nachträglichkeit (retrospective causality): events that occur later may not only change the significance, but the nature of prior events as well (Van Zyl, 53-55). Archives do not have ‘a single past, but an unbroken sequence of past times leading backward from the present moment.’5
Archives, however, are not only leading backward: they secure the present for the future, transmitting authentic evidence of human activity and experience through time (Ernst 2002, 120-122). Archives, libraries, museums are all in the ‘memory business’, ensuring ‘time future contained in time past’ (Ketelaar 2004). But what distinguishes archives from all other memory institutions is that the individual, organizational, and collective memories they preserve are not defined primarily in terms of a cultural heritage because they have been created as ‘process-bound information’: ‘[I]nformation generated by coherent work processes and structured and recorded by these work processes in such a way that it can be retrieved from the context of those work processes’ (Thomassen, 374).

Archives are memory because they are evidence. They are not only evidence of a transaction, but also evidence of some historic fact that is either part of the transaction itself, or that may be traced via the transaction, or that which is otherwise embodied in the record, or in the context of the archiving process.

Archivalization

Archiving is mostly understood to be the activity that follows upon the creation of a document. Archival theory, however, carries archiving one step forward because at the front end of a record-keeping system, documents are captured, that is, accepted by the system. Derrida has introduced the notion of archivation (archivization in the English translation). Archivization extends beyond capture, it includes the creative phase before capture, it is consigning, inscribing a trace in some external location, some space outside. Paul Ricoeur uses the term archivation too, referring to writing down the oral testimony and then setting aside, assembling, and collecting these traces (Ricoeur, 166-168).

Before archivation, however, before the impression of a document, there is a ‘moment of truth’ (Stuckey, 270) which I propose to call archivalization, a neologism, meaning the conscious or unconscious choice (determined by social and cultural factors) to consider something worth archiving (Ketelaar 1999; 2000, 328-329). Archivalization precedes Derridean archivation and archiving. The searchlight of archivalization has to sweep the world for something to illuminate in the archival sense, before we proceed to register, to record, to inscribe it, in short, before we start archivation and archiving.

We are looking at the Pompeii fresco of a girl writing (Illustration 3). Is she writing? Is she thinking? About what? I would suggest that we are looking at someone in the process of archivalization, pondering her choices of whether to inscribe her thoughts or not, whether to take the next step or not, toward archivation – handwriting the trace and then to archive it.

By differentiating archivalization from subsequent inscription or archivation, which is then followed by archiving, we gain a better understanding of the tacit narratives of the archives (Ketelaar 2001). These tacit narratives, the meanings of archives, must be inferred from the content, structure, and form of the archival documents.

Digital Records

In paper records, content, structure, and form are physically present in the document and its physical arrangement. Digital records, however, do not present their content, structure, and form in or on a physical medium, but rather in a digital representation that serves as a generator for various ways in which the document can be made visible (Simons, 57). Digital documents are potential documents, that emerge only by virtue of software that understands how to access and display them (Rothenberg). Moreover, the circumscription of a digital document is different from a physical document because it often includes links to other documents, and it is variable and changeable, fluid and unstable. An original no longer exists because, intrinsically, each recording or representation (on a medium, a screen or as a printout) is a representation or rather a reconstruction made by the operating system and the application software.

As David Levy notes, digital materials are made up of both the digital representation and the perceptible forms produced from it. The digital archive can only be communicated through space and time by being continuously ‘manufactured just-in-time, on the spot’ (Levy, 152). ‘Ensuring the technical and intellectual survival of authentic records through time’, as ISO standard 15489 requires, means reconstructing the content, form, and structure of a record through time, every time making an ‘authentic copy’ of an original that never existed in reality but only as a virtual construction.

The original in the digital age has disappeared, it has to be reconstructed time and again by means of copies: the original is inscribed in its copy (Ernst 1988, 515). The copy permits a (re)construction of the original. Retrieving the original by reconstruction is like the reconstruction of information stored in human memory. As neurologist Antonio Damasio explains, the memory you have of someone you met is not stored as a lifelike copy, not like a Polaroid picture, but rather as ‘dispositions’, a set of codings for reactivation or reconstruction:

And once you apply the reconstruction mechanism, you have a chance of bringing to your mind some kind of image that approximates the image that you actually had in perception. (Damasio and Mulder 2003)
The ‘disappearance of the original’ in the digital age has led to a major paradigm shift in archival science, as Hugh Taylor foresaw in as early as 1988 (Taylor). Archival science can no longer utilize many of the concepts that were applicable in the world of paper and parchment. Its object is no longer a tangible document or file in a logical and partly physical context that can be arranged and described, used and preserved, as in the paper world: the object is the archive process rather than the archive product.

**Duplex Writing/Reading**

A digital document is not a thing in and of itself. It is ‘no more than an interpretive moment in a never-ending conversation with the texts’.[4] The digital document speaks in a dialogue with the reader/viewer, who may be outside the visible text, but never outside its invisible narrative.[4] In our digital world, as Mark Poster affirms ‘texts become “hypertexts” which are reconstructed in the act of reading, rendering the reader an author’ (Poster, 188). The text becomes an interactive dialogue between ‘the writer and her readers, and the reader could be asked to share the responsibility for the outcome’ (Bolter, 112). Writing becomes part of a dual process of writing/reading. The writer and the reader sit at their keyboardless computer screens and connect with their archiving machines via a stylus or their voices or the heat of their fingers as they touch the screen. The hand of handwriting has been transformed into a part of the machine, entailing not only ‘a profound transformation of the body and of our relationship to our own body’ (Derrida and Stiegler, 96), but also embodying handwriting with a new functionality.

**Digital Handwriting**

The hand that is writing on a keyboardless tablet PC or PDA connects the human body with a machine body, leaving no permanent mark on the substrate, but transferring from one body to another the potentiality of reconstruction. Contingent to that reconstructibility are the features of conventional handwriting: immediacy, singularity, iterability and corporeality – or rather the digital equivalents of these features. Immediacy and corporeality of digital handwriting are an illusion. The archiving machine stores a simulacrum of what has been ‘written’ (i.e., constructed by the hand interfacing with the machine), it may even be able to ‘remember’ (i.e., reconstruct) the writing hand. Moreover, even the writing mind can be reconstructed by means of an archaeology of the ***mise-en-abîme*** of continuous archivization and archivization. From the archival machine behind the screen we can recall a ‘copy’ of what we wrote. The copy permits a (re)construction of the original. To quote Aleida and Jan Assmann refuting Walter Benjamin, the original is ‘not displaced by its copies, but is constructed by them and can thrive with them’ (Assmann and Assmann, 156). Similarly, handwriting as a product may be displaced by writing on archiving machines, but handwriting as a process can be constructed through the archiving process and can thrive.

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**Archival Constructs**

This ‘new’ writing (hands-on or hands-off) on archiving machines constitutes one of what Derrida calls archival technologies that determine ‘not merely the moment of the conservational recording, but rather the very institution of the archivable event’ (Derrida 1996, 18). Archives do not merely serve to preserve for the future an archivable content of the present. Rather, that present and its relation to the future are constructed through archiving: in Derrida’s words ‘The archivization produces as much as it records the event’ (Derrida *Archive Fever*, 17; *Archive Fever. A Seminar*, 35). The Amsterdam *Achterhuis* (the Secret Annex) – I do not mean the brick and mortar one, but the *Achterhuis as a lieu de mémoire* – exists only because of its archivization in Anne Frank’s *Diary*. Another example: according to Dutch law, the fact of a child’s birth only exists by virtue of its registration. Therefore, when a baby dies before its birth has been registered, a birth certificate is not issued, only a certificate stating that the child was not alive at the moment of declaration. In other words, the birth has never happened, because it was never registered (Ketelaar 1999, 57). A photograph or a video is not just a recording: it constitutes the event. Think of home movies: the happy moments in the movie are staged, they are produced by their archivization in the movie (Roepke). Even what is transmitted on television ‘live’ is ‘produced before being transmitted’ (Derrida and Stiegler, 40).

Archivization systems are active creators of categories because people in these systems, through archivization, ‘classify away traces that they know to be relevant but which should not be officially recorded’ (Bowker and Star, 279, 321). It is impossible to die of old age, because the International Classification of Diseases does not recognize ‘being born out’ as a cause of death (Bowker and Star, 90, 276). Bowker and Star give many other examples of the way in which life is constructed and ordered by classification, labeling and categorization. Their study affirms Derrida’s assumption that ‘the mutation in technology changes not simply the archiving process, but what is archivable – that is, the content of what has to be archived is changed by the technology’ (Derrida *Archive Fever 6, 17*; *Archive Fever: A Seminar*, 46; Ketelaar 1999, 2000). Technology conditions not only the form or the structure, but also the content of the writing. Of course, technology is not the only factor that determines form and content, because cognitive and cultural agencies also play an important role, as demonstrated by the following examples.

Until quite recently, Dutch people were instructed to deal with only one subject when writing a letter to the government – the governmental filing system, with one file for each subject, could not cope with a citizen’s letter that included more than one subject (Ketelaar 1999, 214-215). The technology of archivization conditions the archivization (the choice of a citizen to deal with a particular topic in her letter), which in turn, conditions archivization and archiving because when incoming letters deal with only one subject, they can be dealt with in a relatively simple work process, sustained by a relatively simple document management system.

When one uses SMS (Short Message Service) on a mobile telephone, the form and content of the message will be different from a message sent by e-mail or a...
message conveyed in a handwritten letter. This difference is due to the technology in terms of a complex interplay with social and cultural norms governing *what to say* and *how to say it*.1

Likewise, the technology of handwriting on a tablet PC or PDA conditions the content of the writing, which to a large extent will be different from the content of a handwritten text on paper.

In the preceding sections I have argued that the archive-as-a-process works in two ways. Looking backward — before the impression or archivization — we encounter archivization. And looking the other way, we see that the archive is never closed, it is shaped by the anticipation of the future – the future anterior (Derrida *Archive Fever*, 18, 68; ‘Archive Fever: A Seminar’, 40). But this power of the archive is limited by the paradox of anticipation: the archive fever which, by anticipating death, is already ‘deadening death’ to the point where it can’t even happen anymore’ (Derrida and Stiegler, 106). Here and now, the ‘impression’ produces as much as it records the event, embodying the event with meaning, while staying receptive to future activations of the archive which will add to and change its former meanings: ‘a perpetual endgame of inscriptions’ (Brothman, 192).

The handwriting on, in or with an archiving machine that is kept in the machine’s archive memory is only decipherable and understandable in terms of the processes of archiving and archivization and archiving through which the archiving machine was constituted and subsequently activated and re-activated by ever new impressions.

It does not matter by what technology these impressions are inscribed, as long as the archiving machine keeps a trace of what has been traced on the surface.

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**Eric Ketelaar**

**Sign Here!**

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**Notes**

1. Derrida’s translator Eric Prenowitz writes: ‘Archival machines. I prefer archiving machines as a translation of machines à archiver. Reverely, the machines à archives in Derrida’s *L’Écriture et la différence* (translated in Derrida’s *Writing and Difference* as ‘machines for storing archives’) might be called archival machines (Archivmaschinen).’

2. According to the Oxford English Dictionary: ‘The action of one who writes, in various senses: the penning or forming of letters or words; the using of written characters for purposes of record, transmission of ideas, etc.’ ‘That which is in a written (now also typewritten) state or form; something penned or recorded; written information, composition, or production; literary work or compilation.’

3. The word was adapted at a time when the Germans adopted the Roman way of writing, replacing the scratching of runes (krassen, German: reissen, old Dutch rijten, compare writing). See N. van Wijk, Franck’s *Etymologisch woordenboek der Nederlandsche taal*, 2nd ed. ’s-Gravenhage: Martinus Nijhoff, 1912.


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**Works Cited**


