

DATA BASED CULTURE

THE DIGITAL DATABASE A MATERIAL RECONFIGURATION
OF THE ARCHIVE AS A CULTURAL FORM OF EXPRESSION

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ABSTRACT

Within the field of new media studies, digital databases are often used as a research tool for data collection or as a source for data visualisation. In this thesis however, the database will be used as case study for a more philosophical analysis. Situating the digital database, as theorized by Lev Manovich, within the poststructuralist archival ideas of Michel Foucault and Jacques Derrida, the aim of this thesis is to examine the digital database on a material and ontological level. Manovich recognizes a shift from the narrative to the database as a cultural form of expression. This thesis puts to the test whether we can indeed acknowledge his theory, or that it is more appropriate to speak of another material reconfiguration of the archive.

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INTRODUCTION

When we think of the archive, the most common notion is a dusty place concealing old manuscripts, sepia photos or music and film tapes. Of course a lot of records are kept that way, but the truth is history never stops. In whatever way they exist, archives are crucial to our remembrance of the past. As new technologies emerge, the format in which records are created and retained is constantly subject to change. Since the last part of the twentieth century more and more archives are digitizing their content, or have emerged digitally. A lot of research has been done on the change from analogue to digital archives, mostly concluding that digital archives give us more participatory opportunities (Bergervoet 2011; Van Riet 2011). In this thesis however, I will not try to map to what extent archives give us these participatory opportunities – like game-interaction and downloading, or *prosumerism*¹ and *crowd sourcing*² – but rather, whether the ‘digital’ in the archive has changed it as cultural form.

Changing with different technological developments and/or cultural situations, and examined from different philosophical views, the concept of the archive has kept its ambiguity through time. Two influential philosophers on the matter are Michel Foucault and Jacques Derrida. Despite both being called poststructuralists or postmodernists – although neither of them agrees with such a title – they are often positioned as two completely different thinkers on the concept of the archive. Both scholars have very innovative and anti-traditional ideas. Foucault’s approach is searching for differences, distortions and discontinuities in history through archives as systems of law and ordering. Derrida on the other hand focuses on deconstructing every element of the (Freudian) archive in both a psychoanalytical and a linguistic way in order to find the ontology of the archive. Although they both handle a rather abstract conceptual definition of the archive, one could question whether their ideas are nonetheless saturated with the notion of paper and print media. By using both perspectives of Foucault and Derrida I will not introduce yet another definition of the archive, I will rather use their ideas to question whether we can speak of a new cultural form of the archive, now that the digital has become inescapable in contemporary culture.

In order to get a grip on Foucault and Derrida’s idea of the archive, I will mainly use their primary work on archives, which for Foucault is *The Archaeology of Knowledge: And the Discourse on Language* (1972), and *Archive Fever: A Freudian Impression* (1995) for Derrida. Foucault argues that there is no such thing as an objective truth or past supported by documents (in a paper and print archive). Therefore only temporary social or cultural constructions are possible. He assumes that history is always written from a perspective of the present, and that it fulfils the need of the present.

¹ Combination of the words ‘consumer’ and ‘producer’. It is a term that indicates some form of user participation, coined by Toffler (Schäfer 2008: 71).

² Combination of the words ‘crowd’ and ‘outsourcing’. Online companies use the feedback of the crowd to improve their product.

Discourses and their logic, governed in such historical positioning, are what Foucault refers to as ‘archives’ (EGS Editors n.d.). *The Archaeology of Knowledge* is usually seen as his most methodological work. He uses the French epistemological tradition as starting point and with his ‘archaeological method’ he tries to uncover the different fields of knowledge in history. In this book, he tries to trace historical shifts in knowledge and knowing. He conceptualizes the archive as a system that, through institutionalization and categorization, frames the huge amount of information that exists in a multiplicity of discourses. Or in his own words: ‘Far from being that which unifies everything that has been said in the great confused murmur of a discourse, [the archive] is that which differentiates discourses in their multiple existence and specifies them in their own duration’ (Foucault 1972: 129).

Foucault seeks his answers by decomposing language in different parts (such as discursive formations, enunciations, and statements). In his perspective, the archive has to be described in terms of the possibility of its construction, thus changing it from a static collection of texts to a set of relations and institutions that enable statements to continue to exist, in other words to become part of an archive (SparkNotes Editors n.d.: 8). He sees archives not as a set of things or statements, but as a set of relations: it is ‘*the general system of formation and transformation of statements*’³ (Foucault 1972: 130). He focuses on societal formations and power relations that are generated and sustained through archives. In short, one could say Foucault primarily uses a historical and diachronic approach of the archive.

Derrida, like Foucault, also starts with linguistics by looking for the origin of the Greek ‘arkheion’, and through that he tries to catch the silent operation of the archive. However, unlike Foucault he takes a specific archive as his point of departure: the Freudian archive. Derrida wrote his book at the occasion of the opening of the Freudian archive⁴ but branches off to the question of the archive itself. For Derrida ‘*[t]here is no archive without a place of consignation, without a technique of repetition, and without a certain exteriority. No archive without outside*’⁵ (Derrida 1995: 11). If an archive cannot exist without an external place (which makes memory, repetition, reproduction, or re-impression possible), Derrida argues that ‘then we must also remember that repetition itself, the logic of repetition, indeed the repetition compulsion, remains, according to Freud, indissociable from the death drive. And thus from destruction’ (Derrida 1995: 11-12). This death drive is a drive towards death and self-destruction and is the opposite of survival instincts, sex, and other life producing drives. Because ‘the archive always works, and *a priori*, against itself’ (1995: 12), ‘archive fever’ is inherent to the archive itself. It carries this death, oblivion, or transience within itself. In short, *Archive Fever* discusses the nature and function of the archive, particularly in Freudian terms such as the ‘death drive’. Derrida sometimes makes use of the specific content of the Freudian archive. His answers to the ontological question of the archive constantly blur with the content of Freud’s terminological

³ Italics in original.

⁴ Freud’s last house that is used as a museum.

⁵ Italics in original.

legacy (personal memory, forgetting, the unconscious, death drive, et cetera). He is searching for the archive's ontology and synchronous developments.

Thus, one could argue Foucault searches for historical shifts in periods, epochs of thinking and knowing, while Derrida is more interested in the archive's ontology and the context in which it is constructed. But, to what extent is the Derridian archive different from the digital database? And in Foucauldian terminology, could it be that the archive, in this new digital age, is subject to a material reconfiguration?

It might have become time for a change in thinking and knowing as sustained by the archive. With the rise of new media, connectivity, programmability and 'copybility' are becoming features of the archive. On one hand 'new media is old media that has been digitized' (Manovich 2001: 47), on the other hand ontologically digital media or archives emerge – like *The Internet Archive*⁶ and social sharing sites such as *Flickr*⁷ and *YouTube*⁸. But in the end, digitized and digitally emerged material both can be programmed and copied (Bergervoet 2011: 11). Technically, digital archives become databases through these features. According to Lev Manovich – one of the first scholars who analyzed (and visualized) large cultural datasets – a database is more than such a collection of digital data. In his book *The Language of New Media* (2001) he discusses 'how a database, originally a computer technology to organize and access data, is becoming a new cultural form in its own right' (Manovich 2001: 47).

Although databases are by definition not the same as archives⁹, Manovich shows us how raw sets of data can also give us new insights in culture. In his book he places new media within the histories of visual and media cultures of the last few centuries. According to him '[m]any new media objects do not tell stories; they do not have a beginning or end; in fact, they do not have any development, thematically, formally, or otherwise that would organize their elements into a sequence. Instead, they are collections of individual items, with every item possessing the same significance as any other' (Manovich 2001: 218). He notices that '[a]fter the novel, and subsequently cinema, privileged narrative as the key form of cultural expression of the modern age, the computer age introduces its correlate – the database' (2001: 218).

⁶ <http://archive.org> (02-02-2012). A non-profit organisation, founded to build an Internet library. Its purposes include offering permanent access for researchers, historians, scholars, people with disabilities, and the general public to historical collections that exist in digital format.

⁷ <http://www.flickr.com> (02-02-2012). A photo sharing website.

⁸ <http://www.youtube.com> (02-02-2012). A video sharing website.

⁹ Just like libraries are not the same as archives, even though the concepts are often mixed up, for example: *The Internet Archive* calling itself an 'Internet Library'. Unlike libraries, archives contain primary source documents that have been adjusted over and over again. The content has been selected for permanent or long-term preservation and have a historical and cultural value. Archives preserve in order to normalize, discipline, or to justify and perform policies. Libraries on the other hand, possess multiple copies in order to lend them and to spread knowledge and culture to its users.

To explain this relation between the narrative and the database, he argues that he uses quite a different definition of the database than the definition that is generally used in computer science, in which databases are approached as a structured collection of data¹⁰. A lot of new media are databases in the most basic sense. 'They appear as collections of items on which the user can perform various operations – view, navigate, search' (2001: 219). Therefore the experience is 'distinct from reading a narrative or watching a film or navigating an architectural site' (2001: 219). Manovich sees databases as a cultural form of its own because he recognizes similarities between literary or cinematic narrative, architectural plans and databases: they 'each present a different model of what a world is like' (2001: 219).¹¹

Unlike most new media scholars, Manovich does not reveal effects of new media on the behavior of their users, but rather uses their pure data in order to say something about history. Although he is not a poststructuralist thinker like Foucault or Derrida – searching for discontinuities in history and discourse or ways to deconstruct it – he does not use a classical approach either. In that case he would search for historical continuities by means of a database, or the impact of the database on behavior of its users and/or society. In his rather empirical 'Cultural Analytics' (2007) he tries to say something about culture and society by taking singular data and combining them and recombining them in order to find similarities and differences, eventually inferring from them historical tendencies. In *The Language of New Media* on the other hand, his approach is more theoretical, focusing on the narrative-database shift, and the paradigm-syntagm semiology. Further on I will elaborate the relation between the narrative and the database in terms of Manovich. After a thorough discussion of Manovich's idea of the database as a new cultural form, both Foucault and Derrida's work will be used to question whether we can indeed speak of a new cultural form, or rather that the digital database is just a material reconfiguration of the earlier archive.

I do not intend to find the differences between the definitions of the database and the archive, even though I am fully aware of the fact that these two are not subordinate to one another or a synonym of each other. I will analyze to what extent new digital ways of archiving are understandable in Foucault and Derrida's terminology. I will evolve my research around on one hand Foucault's focus on historical shifts and configurations (approaching the archive as system of law and ordering), and on the other hand Derrida's focus the ontology of the archive, and how it might have changed with the emergence of the Internet.

¹⁰ Data are stored and organised in such a way that they can be found and retrieved by a computer. Different types of databases use different types of organisation: hierarchical, relational or object-oriented (Manovich 2001: 218).

¹¹ An example of his database approach is his research displayed at the Graphic Design Museum in Amsterdam. In this exhibition Manovich shows the change in colour-use in *Time Magazine* covers from 1923 to 2010. In an interview at the museum he argued that through looking at the visualisation of the different covers, tendencies are becoming visible. It shows a fluent shift in design and content of the magazine. He also notes that through the visualisation of the real covers instead of standard statistics, a better overview of different trends can be revealed.

This thesis will concern itself with the following questions: *What new insights can be gained if we analyze digital databases in terms of Foucauldian and Derridian archives? Can they indeed be called a new cultural form (in terms of Manovich), or should we speak of the old cultural form in another material reconfiguration? To what extent are the poststructuralist philosophies of Foucault and Derrida still useful when it comes to digital forms, in other words what gains can be added by their theories to Manovich's rough thesis?*

The first chapter will focus on digital database as a result of the emergence of the Internet and new media. I will do this by giving a thorough introduction to Manovich's *Language of New Media* in which he recognizes a cultural shift (from narrative to database as cultural form) as well as a semiological change in the relation between syntagm and paradigm as once coined by Ferdinand de Saussure. Although Manovich mainly concentrates on cinema rather than literature as narrative expression, I will dissociate from this cinema/literature distinction and introduce two poststructuralist ideas of one specific concept, the archive. Both poststructuralist ideas of the archives are used to analyze this digital database.

According to Manovich, every cultural form presents a different view of what the world is like (2001: 219). Keeping this in mind, we will continue on with the second chapter in which Foucault's ideas will be elaborated. Could his idea of the archive be placed within Manovich's idea of the narrative-database shift? To what extent can Manovich's thesis be supplemented with Foucault's ideas? And where is Foucault's approach insufficient when it comes to the 'digital'?

The third chapter will focus on Derrida's notion of the archive and will analyze to what extent digital databases can be understood in his terminology. Also, his poststructuralist ideas will be compared to those of Foucault within the framework of the database as sketched in chapter one. Are Derrida's ideas also influenced by the twentieth century narrative notion, and in contrast to Foucault's ideas, could it be that Derrida's approach is more compatible to Manovich's data structures or databases? In other words, to what extent is Derrida's ontological and synchronous analysis bound to the techniques of that time, and to what extent does it also imply the digital?

Finally, we will map which new insights can be gained by analyzing digital databases in terms of Foucault and Derrida's idea of the archive. The question whether we can speak of a new cultural form of expression, or only of another material reconfiguration of the traditional idea of the archive will be answered. By using two well-known thinkers of the past century, and analyzing a contemporary cultural form (database) through their perspectives, the goal of this thesis is to unravel the hidden secret of the relation between cultural forms and the way we archive and remember our history.

1. DATABASES AS CULTURAL FORM OF EXPRESSION

In contemporary Western culture, the Internet has become part of everyday life and resulted in the emergence of new fields of study. Although new media studies – as part of humanities¹² – exists for just over a decade, a lot has been written about the Internet and its social, cultural, and societal effects. With the introduction of Web 2.0¹³, stressing its interactive and dynamic character, the Internet gained even more interest among scholars, focusing on *prosumerism*, participation, and *crowd sourcing*. Despite often being criticized¹⁴, Web 2.0 is sometimes considered a sort of utopia in which users or consumers have become the producers, participating in every possible debate, collection, or construction. Ontologically however, the Internet is no more than a huge collection of raw data. According to Lev Manovich, such datasets can give us new insights in culture (2001: 218). But first, let us briefly discuss the emergence of the Internet.

The Internet

The first developments towards the Internet started some 43 years ago. Commissioned by the American Defense Department in 1969, its origin can be found in ARPANET (a network funded by the Advanced Research Projects Agency). ARPANET's initial goal was to share 'computing time on-line between various computer centers and research groups working for the agency' (Castells 2001: 10). Four years later, ARPANET took a next step and connected its own network to other computer networks: 'a network of networks' (Castells 2001: 11). In 1975 it was transferred to the Defense Communication Agency (DCA), to be used between different branches of the military, operating on Transmission Control Protocol/Internet Protocol. TCP/IP would later form the standard for the Internet, enabling distributed, horizontal forms of communication (Rossiter 2006: 86). ARPANET was split up in MILNET (for military use) and ARPA-INTERNET (dedicated to research). The latter was used by the National Science Foundation (NSF) to make its own net: NSFNET. This was around 1988 (Castells 2001: 11-12). ARPANET's original design 'based on multi-layered, decentralized architecture, and open communication protocols' (Castells 2001: 12) was expanded. Also, new nodes were added; points in a network connected with ties that link them with other points to exchange information (Mejias 2010: 611).

In the meantime (1974), UNIX (an operating system) released its source code and permitted to alter it, resulting in the 'open source movement' (and 'hacker culture' when sources were not openly available) (Castells 2001: 13-14). A few years later (1980) Tim Berners-Lee came up with protocols (HTTP, HTML, and URL) that made it possible to exchange information with every computer connected to the Internet. (Castells 2001: 15). Eventually this hypertext system became the world wide

¹² At the University of Amsterdam and Utrecht University.

¹³ By Tim O'Reilly, in 2001.

¹⁴ By scholars such as Tim Berners-Lee.

web (the first browser software). In the mid-nineties Microsoft discovered the Internet and further developed its own operating system (Windows) and browser (Internet Explorer) (Castells 2001: 16). Finally, in 1995, the Internet became commercial when NSFNET was decommissioned and the last restrictions on Internet use were removed. Since then, the Internet started its rapid commercial growth.

New Media

Long before the Internet gained this commonplace position in the 1990s, new media already were a much-discussed topic in pioneering computer meetings such as SIGGRAPH¹⁵ and Ars Electronica¹⁶. New media, in terms of Manovich, are ‘data controlled by software’ (2003: 17). He recognizes that translated into numerical data accessible for the computer, all existing media (and their content) became computable. In short, ‘media become new media’ (Manovich 2001: 25). Although *The Language of New Media* (2001) initially seems to aim at the construction of the definition of new media, Manovich actually uses technical and cultural developments to analyze how we express ourselves through new media in this data based age, and how this is different from the twentieth century in which the narrative flourished as cultural form of expression.

Popular database and new media research mostly focuses on topics such as: accessibility and authorship (Barwick 2006); the relational shifts between personal memories and public archives (Van Dijck 2004, Ketelaar 2008, Price and Smith 2011); the roots or ontology of the networked archive (Friedrich 2010, Moss 2008); or interpreting archiving as user activity or participatory culture (Van Riet 2011, Schäfer 2008). Manovich approaches new media on an epistemological level, concluding that because of new media the relation between materiality and virtuality has changed, leading to new ways of thinking and knowing based on these new data based forms in comparison to the traditional narrative form. Inspired by his work, this thesis will put the poststructuralist idea of the archive and the database as its contemporary equivalent in line, in order to find whether we can speak of the digital database as a new cultural form of expression, or only of a material reconfiguration of earlier archival forms.

Galaxies, paradigms, and discourses

Unlike predicting a new period through the analysis of earlier historical changes, calling them galaxies (McLuhan 1962, Castells 2001); stressing changes in thinking within a certain field of research, calling these fields paradigms (Cook 2001, Delmas 2001); or making an analysis of language itself, things said, calling it discourse (Foucault 1975), Manovich does not put a nametag on his periodical

¹⁵ Special Interest Group on GRAPHics and Interactive Techniques. An annual conference on computer graphics held in different cities of the U.S.

¹⁶ Austrian Festival for Art, Technology, and Society.

research¹⁷. His work is different because he allocates shifts in thinking and knowing to cultural forms of expression, rather than focusing on thinking itself. By using cinematographic concepts, literary theory and art history, he notices a shift from the narrative in cinematographic times to the database as key form of cultural expression in the computer age (2001: 218). One could say Manovich suggests a shift from a narrative-based to a database-based episteme. Since Manovich sees contemporary thinking and knowing as sustained by new media as data based forms, let us first delve into his concept of the database.

The database

For Manovich 'a computer database is quite different from a traditional collection of documents: It allows one to quickly access, sort, and reorganize millions of records; it can contain different media types, and it assumes multiple indexing of data, since each record besides the data itself contains a number of fields with user-defined values' (Manovich 2001: 214). According to him the database is a 'new symbolic form of the computer age [or] a new way to structure our experience of ourselves and the world' (2001: 219). The world comes to us as a never-ending, unstructured collection of data (texts, images or videos), and therefore he suggests it is appropriate we treat it as database. And although some databases have a traditional character, in which they somehow tell a story, this narrative way of organizing is only one of many possibilities to show its content (2001: 219-220).

The database as cultural form of expression really boomed because of the Internet. Websites have become 'sequential lists of separate elements such as texts, images, and sound records' (2001: 220). They have an open character and are rarely complete: data can be added, content can be adjusted, and new links can be made at any time. When the content is constantly adjusted, Manovich argues, 'the result is a collection, not a story' (2001: 221). Because of this development, a coherent narrative is non-existent within a database that keeps changing. Where data based forms refuse to order a priori trajectories (of course content or data is ordered in tables), narratives always create a cause-and-effect trajectory. Therefore he concludes, 'database and narrative are natural enemies' (2001: 225). Both forms claim to have 'an exclusive right to make meaning out of the world' (2001: 225).

The narrative-database shift

Manovich uses the shift from the narrative to the database to show how cultural forms of expression influence thinking and knowing. By this, he does not mean a sudden transition between both forms has taken place. The opposite is true, narrative as cultural form is still active in our way of interpreting the

¹⁷ Foucault argues that discourse is the material appearance of language. 'Discourse must not be referred to as the distant presence of the origin, but treated as and when it occurs' (Foucault 1972: 25). Later on, Foucault will place the concept of discourse within a historical perspective, concluding that every epoch has its own discourse. He will call this epistemes (Foucault 1970).

world. Practically all media in computer culture are in fact databases, he even understands new media 'as the construction of an interface to a database' (2001: 226), but while some of these new media follow their explicit database logic, others still follow the narrative perspective. Now that the database has become central to the creative process in computer culture, the interface has become separate from the content (while interface and work used to be the same in earlier cultural forms, such as art or cinema) (2001: 227). The interface provides the user with access to the underlying data, and every interface provides a different experience of the database. These interfaces can show different ways of representing the same work (database). '*[T]he new media object consists of one or more interfaces to a database of multimedia material*'¹⁸ (2001: 227). Now the user can follow different trajectories (links between records of a database). This way, the concept of the narrative is redefined into one of the possible paths a user can choose within the database as cultural form.

By comparing the database with the narrative, Manovich sees the database as the unmarked term (2001: 228). With this he means the database can have a narrative form, but it can have another form just as easily. 'More precisely, a database can support narrative, but there is nothing in the logic of the medium itself that would foster its generation' (2001: 228). Still, the narrative form is very popular. With the becoming of the computerized world '[n]ew media does not radically break with the past; rather, it distributes weight differently between the categories that hold culture together, foregrounding what was in the background, and vice versa' (2001: 229). Rather than radically replacing certain elements, the distribution of the significance of the different elements changes. In order to explain these changes, Manovich uses the semiological theory of syntagm and paradigm of Ferdinand de Saussure, the famous Swiss linguist who is widely considered one of the founding fathers of structuralism.

The syntagm-paradigm relation

Although initially designed to describe languages (and later applied to other semiotics by Roland Barthes) the model of De Saussure is used to point out the syntagmatic and paradigmatic dimensions of the elements of a system. In this model '[t]he syntagm is a combination of signs, which has space as a support' (Manovich 2001: 230): in linguistics, a syntagm can be seen as a linear sequence of words that form a sentence. The paradigmatic dimension on the other hand, forms sets within a language, such as nouns or synonyms: 'The units that have something in common are associated in theory and thus form groups within which various relationships can be found' (Manovich 2001: 230). Importantly, the syntagm is present and articulated in language (linear sequences which are physically written on paper), while paradigms remain absent (relations that are only in the writer's and readers' head). This means that syntagms are explicit and real, while paradigms are implicit and imagined (Manovich 2001: 230).

¹⁸ Italics in original.

Manovich puts this Saussurian theory in line with his narrative/database distinction. According to him, literary and cinematic narratives have a linear character (shots, scenes) as is the case with present syntagms, while the ideas, the imaginary of the author, or styles only exist in a virtual world, as paradigm. In a way then, the construction of a traditional narrative is a materialized syntagm, selected from a virtual paradigmatic ‘database’ of choices. In new media, this relationship is reversed. ‘Database (the paradigm) is given material existence, while narrative (the syntagm) is dematerialised. Paradigm is privileged, syntagm is downplayed. Paradigm is real; syntagm, virtual’ (Manovich 2001: 231). The data based form changes the relation between syntagm and paradigm. ‘On the material level, a narrative is just a set of links; the elements themselves remain stored in the database. Thus the narrative is virtual while the database exists materially’ (Manovich 2001: 231).

In short, all semiotic expressions – including the classic narrative and the database form – have a syntagmatic and a paradigmatic axis. Spoken or written texts or utterances are actualized syntagms, drawing from a virtual paradigmatic potential (language in its virtual totality). But in new media, when it comes to data based utterances the paradigmatic axis is fixed (in the database), while the syntagmatic axis is a virtually infinite potential of combinations. For example, a search result list on Google is a syntagmatic non-fixed expression constructed out of a fixed paradigmatic choice of database material. Through this approach, common notions of the Internet and the relation between syntagm and paradigm can be put in a different perspective. Take for instance the discourse that evolved around new media definitions such as Web 2.0 and social media. New media scholars and popular culture stress the Internet’s participatory character and the possibility for consumers to become producers (Manovich 2008). One could call this syntagmatic participation. But approached from Manovich’s perspective, the paradigmatic axis, in this case the Internet as data based form, has become privileged over its syntagmatic combinations¹⁹. In other words, most research attention goes to the syntagmatic axis (what users do with data), while the paradigm remains underexplored and under-theorized; but precisely data collections can give us more insights in past and present thinking and knowledge. In this thesis I will examine this underexplored paradigmatic axis by using Foucault and Derrida’s archival concepts. Manovich emphasizes that new media, with their interactive character and their user-friendly interfaces make ‘psychological processes involved in cultural communication’ more explicit.

‘Interactive interfaces foreground the paradigmatic dimension and often make explicit paradigmatic sets. Yet they are still organized along the syntagmatic dimension. Although the

¹⁹ In a similar vein of thought, Manovich (2008) uses two categories (strategies and tactics) of De Certeau (1984) to social media. In his famous chapter ‘Walking in the City’, De Certeau argues, that a city’s aesthetics, its rules, and signals, are constructed by companies or governments. The subject however, the single walker, moves around in this city, making up his own path, shortcuts and tactics (1984: 126-133). Here De Certeau’s tactics and strategies can be approached with Manovich’s usage of the syntagm-paradigm relation. The different paths a subject takes – his tactics – are different syntagmatic non-fixed combinations he chooses from the cities strategies – its paradigmatic collection of ‘infrastructural data’.

user is making choices at each new screen, the end result is a linear sequence of screens that she follows. This is the classical syntagmatic experience' (2001: 232).

This is what strikes him: Why are new media still organized along this language-like sequential dimension? He suggests that new media follow the dominant twentieth century semiological cinematic order. To let go of this twentieth century notion, Manovich suggests merging the narrative and database form into a new cultural form of expression.

A narrative-database hybrid

Manovich prefers to think of database and narrative forms as 'two competing imaginations, two basic creative impulses, two essential responses to the world' (2001: 233). Both forms already existed before new media, and new media are not a way to correlate them or deduce them from earlier media technologies and/or studies. The narrative and database approaches are ways to make meaning out of the world, but most media objects contain traces of both forms. According to Manovich, new media are just another battlefield for the narrative and database to compete, although it must be said that the database has become more dominant than ever. 'The digital computer turns out to be the perfect medium for the database form' (2001: 234). But although the database seems to be the dominant form in new media, the countless attempts to create 'interactive narratives'²⁰ in times of hypertext fiction show that we are not satisfied with the computer as database functioning solely as a cataloguing or encyclopedic device. The search for new media specific narratives has begun (2001: 237). With this he suggests one should search for a narrative/database hybrid, just as Vertov manages to do in his film: *Man with a Movie Camera* (1929). Manovich uses this film as a visual index to some of his ideas throughout his book (2001: xiv). The film exists of three levels: a cameraman shooting material for the film, shots of the audience watching the film, and the film itself (that which the cameraman has recorded). He concludes that if this third level is a text, the other two levels can be thought of as meta-texts (2001: 241). By filming the editing room (2001: 240), the machines, and work activities the 'paradigm is projected onto the syntagm' (2001: 241). This way, a medium can have a database, as well as a narrative form. According to Manovich, this is relevant for new media studies: Vertov has achieved something most new media designers still have to figure out: 'how to merge database and narrative into a new form' (2001: 243), a narrative-database hybrid.

The database as a new cultural form of expression

Manovich's goal is to show continuities in the shift from old to new media. He does this by mapping the interplay between historical repetition and innovation (2001: 285). He claims that culture does not

²⁰ Referring to the different trajectories one can choose within a database. Manovich rejects the label 'interactive narrative' because he thinks narrative and database cannot be approached on the same level in computer culture.

change overnight (in response to the postmodern/modern rupture), and that its slow shifts are hard to get a grip on. His goal is 'to create trajectories through the space of cultural history that would pass through new media, thus grounding it in what came before' (2001: 285), just like he tried to find continuities in his analysis of Time Magazine, as mentioned in the introduction. He argues that although new media emphasize cultural forms, at the same time they put them up for redefinition. Different elements of new media interfaces result into separation from traditional connections and the formation of new ones. Also, relations between different cultural elements have changed: the database challenges the narrative, the search engine the encyclopedia, and online distribution traditional offline formats (2001: 333).

Manovich's observation of the database as cultural key form after the narrative (2001: 218) already seems to imply a new episteme. The next two chapters will examine whether the digital database indeed can be approached as new cultural form. Just like Manovich argues that it is time for a new media specific narrative (2001: 237), one could say the time has come to form a data based specific archive. The changes in the relation between syntagm and paradigm, and the shift from narrative to database as cultural form, have technically been realized, but on the level of thinking and ways of archiving we seem to be stuck with former cultural forms and semiological relations.

Based on Manovich's analysis, it makes no sense to let go of the twentieth century notion of the narrative. It is important to take note of the different appearances of hybrid forms. Although Manovich is not a differential thinker, his idea of the digital database will now be examined by first using Foucault's historical and diachronic approach of the archive, followed by the Derridian synchronic and ontological search for the archive's ontology. I will examine whether or not their ideas are still up to date in thinking about the archive in its digital form. I will do this by taking Manovich's notion of the narrative-database shift and his usage of the structuralist syntagm-paradigm relation. For now, let us first discuss the historical approach of Foucault.

2. THE ARCHIVE AS ARCHAEOLOGY

To get a historical notion of the position of the archive in the construction of knowledge and thinking, one should turn to Michel Foucault. Foucault's work is usually divided into three phases: institutions²¹ and power (1960s), discourse (1970s), and subject formation (1980s). He never saw himself a philosopher and preferred to be called a historian of systems of thought (after a position he held at the Collège de France). Sometimes Foucault is put in the 'structuralism box', a style of thought notable because it adopted linguistics in its philosophy (O'Farrell 2007: 11). Foucault acknowledges the impact of De Saussure, the structuralist founding father of linguistics. De Saussure focuses on structures; chains of differences that are determinant for all kind of phenomena. Structuralists aim to systemize contradictions, dichotomies, differences, and relations. Foucault is one of these differential thinkers, thinking in relations. However, other than focusing purely on linguistics, he develops a historical method in which the focus is no longer on determining structures, but on changing practices. With this he does not suggest history has a sort of hidden layer, rather he argues that regularities cannot exist without contradictions. Thus his goal is not to point out or systemize contradictions, but to approach them as being part of regularities. Because of his specific historical method, Foucault cannot be seen as a pure structuralist, but rather as a poststructuralist.

This chapter will elaborate the rather slippery notion of the archive as introduced by Foucault in *The Archaeology of Knowledge*. Although little is said about the archive itself, the concept seems to play a prominent role in his archaeological 'method'. Indeed, this relation between archaeology and the archive is what I find most interesting for my analysis. Foucault's search for the concept of the archive – its structural principle – and the way certain commandments – inherent power structures – are performed, can be put in line with Derrida's linguistic search for the ontology of the archive. To get a grip on the Foucauldian concept of the archive and archaeology, some of his other concepts – discourse, statements, and discursive formations – must be discussed. In short, this chapter will function as an introduction to his 'method' (archaeology), his notion of the archive, and the way he traces authority and power to certain fields of knowledge (e.g. grammatology or medicine) by approaching the archive as a system.

The document-monument relation

Sometimes Foucault seems to literally discuss archives, while sometimes he uses a more metaphorical notion: the archive as a general system of rules, law, and ordering. Although he does not make this distinction explicitly, it can be noted in the use of certain concepts, for example the document. In the introduction of his book, he defines the document as the physical fixation of historical writing, but

²¹ Institutions, for Foucault, 'are a way of freezing particular relations of power so that a certain number of people are advantaged' (O'Farrell 2007: 7).

soon mingles it with the concept of the monument, giving the document material existence. In other words, Foucault approaches contemporary history as documents that are transformed into monuments, i.e. as being material discursive practices (as if they were fixed in stone forever). In order to explain this, Foucault starts off with criticizing historians that focus their research on long periods, their shifts, and sudden changes after periods of continuity (1972: 3). He argues that:

‘the great problem presented by such historical analyses is not how continuities are established, how a single pattern is formed and preserved, how for so many different, successive minds there is a single horizon, what mode of action and what substructure is implied by the interplay of transmissions, resumptions, disappearances, and repetitions, how the origin may extend its sway well beyond itself to that conclusion that is never given – the problem is no longer one of tradition, of tracing a line, but one of division, of limits; it is no longer one of lasting foundations, but one of transformations that serve as new foundations, the rebuilding of foundations’ (Foucault 1972: 5).

Foucault is concerned with practices, not some teleological tracing back of events in order to give evolutions and revolutions a place in a certain ‘timeline’ and to point out their purposes in the construction of history. Although we seem to look for discontinuities as milestones of the foundation of our history, history itself seems to abandon such events in order to form a ‘smooth history’. Or, in his own words: ‘[T]he history of thought, of knowledge, of philosophy, of literature seems to be seeking, and discovering, more and more discontinuities, whereas history itself appears to be abandoning the irruption of events in favour of stable structures’ (Foucault 1972: 6). With this quotation I want to stress that Foucault’s concepts of ‘history of knowing’ and ‘history itself’ are – either purposely or not – two different but very intermingled concepts. Let us first focus on Foucault’s approach of history. He argues history has two forms of description: uninterrupted unities on one hand, and ideas and knowledge on the other:

‘Despite appearances, we must not imagine that certain of the historical disciplines have moved from the continuous to the discontinuous, while others have moved from the tangled mass of discontinuities to the great, uninterrupted unities; we must not imagine that in the analysis of politics, institutions, or economics, we have become more and more sensitive to overall determinations, while in the analysis of ideas and of knowledge, we are paying more and more attention to the play of difference; we must not imagine that these two great forms of description have crossed without recognizing one another’ (1972: 6).

And although he argues both forms cannot completely ignore one another, by focusing on differences, we at least try to do so. This is what Foucault argues is problematic, and what can be summed up in the ‘question of the *document*’. The document for Foucault:

‘is not the fortunate tool of a history that is primarily and fundamentally *memory*; history is one way in which a society recognizes and develops a mass of documentation with which it is inextricably linked. To be brief, then, let us say that history, in its traditional form, undertook to ‘memorize’ the *monuments* of the past, transform them into *documents*, and lend speech to those traces which, in themselves, are often not verbal, or which say in silence something other than what they actually say; in our time, history is that which transforms *documents* into *monuments*. In that area where, in the past, history deciphered the traces left by men, it now deploys a mass of elements that have to be grouped, made relevant, placed in relation to one another to form totalities’ (Foucault 1972: 7).

Archaeology, according to Foucault, used to be a discipline devoted to *monuments*. In his introduction he argues:

‘There was a time when archaeology, as a discipline devoted to silent monuments, inert traces, objects without context, and things left by the past, aspired to the condition of history, and attained meaning only through the restitution of a historical discourse; it might be said, to play on words a little, that in our time history aspires to the condition of archaeology, to the intrinsic description of the monument’ (1972: 7).

With this he suggests that archaeology first sought to become (written) history, but now history should strive to become archaeology. Foucault argues that the use of an archaeological method for history has four consequences. First is the effect of the proliferation of discontinuities in the history of ideas and historical periods. This used to be concerned with defining relations between events, while now it is concerned with constituting series (1972: 7). Second, for history the discontinuous was first both the given and the unthinkable: while discontinuities used to be removed from history in order to reveal the continuity of events, it is now the basic element of historical analysis (1972: 8). Third, the idea of a *total history* is disappearing and becomes replaced by a *general history*. We no longer need to search for overall forms of cohesion, but we have to find systems of homogeneous relations. We are not distinguishing what kind of series, but also what ‘series of series’ are possible to be drawn (1972: 9-10). Lastly, new historical writing has consequences on a methodological level, leading to a situation in which ‘[t]he structure/development opposition is relevant neither to the definition of the historical field, nor, in all probability, to the definition of a structural method’ (1972: 11).

After this summing up of methodological consequences of approaching history in an archaeological way, one could argue that for Foucault, the archaeological method of history is finding systems. Within these systems – general, not total systems (of archives) – time can be conceived in multiple terms, of which ‘totalization’ is one. ‘Making historical analysis the discourse of the continuous and making human consciousness the original subject of all historical development and all action are the two sides of the same system of thought’ (1972: 12). Thus, Foucault’s aim is not to use ‘the categories of cultural totalities’ (1972: 15) but to question teleologies and totalizations (1972: 16). Also his goal is ‘not to transfer to the field of history, and more particularly to the history of knowledge (*connaissances*), a structuralist method that has proved valuable in other fields of analysis’ (1972: 15) Rather, it ‘is to uncover the principles and consequences of an autochthonous transformation that is taking place in the field of historical knowledge’ (1972: 15). Foucault does not want his book to belong primarily to the debate on structure, but to ‘the field in which the questions of the human being, consciousness, origin, and the subject emerge, intersect, mingle, and separate off’ (1972: 16).

Foucault closes his introduction with a short reflection on his way of writing of earlier works such as *Madness and Civilization* (1964) and *The Order of Things* (1970), and concludes that although his way of writing in *The Archaeology of Knowledge* at first glance might seem cautious and stumbling, at least this book will not give the impression of an analysis which is conducted in terms of cultural totality (1972: 16). Just like Derrida argues that the archive is constantly working against itself, Foucault asks his readers not to ask him to remain the same: ‘leave it to our bureaucrats and our police to see that our papers are in order. At least spare us their morality when we write’ (Foucault 1972: 17).

Discourse, the archive, and statements

Let us first discuss some of Foucault’s major concepts of his book. It is almost unnecessary to say, but discourse for Foucault is not some simple analysis of things said in a certain period, in order to stress dominant ideas or the thinking of a specific time. Unlike linguists, Foucault approaches discourse as material practice of more than just language. He is not interested in broader fields of knowledge, but rather focuses on specific fields, discursive formations²² such as psychiatry, biology, and grammatology. These discursive formations are what Foucault tries to catch through his archaeology of the archive. In Foucauldian terminology, the archive is not some collection of records of the past, but rather a controlling system. He does not discuss ‘the typical archive’. For him the archive is a regulating systematic, within a discursive formation/discipline. The archive, in his own words:

²² In his later works, the concept of power will play a more prominent role. His idea of power is being practiced or created within or via discursive formations.

‘is not that which, despite its immediate escape, safeguards the event of the statement, and preserves, for future memories, its status as escapee; it is that which, at the very root of the statement-event, and in that which embodies it, defines at the outset *the system of its enunciability*. Nor is the archive that which collects the dust of statements that have become inert once more, and which may make possible the miracle of their resurrection; it is that which defines the mode of occurrence of the statement-thing; it is *the system of its functioning*. Far from being that which unifies everything that has been said in the great confused murmur of a discourse, far from being only that which ensures that we exist in the midst of preserved discourse, it is that which differentiates discourses in their multiple existence and specifies them in their own duration’ (Foucault 1972: 129).

Foucault defines the archive as the ‘*general system of the formation and transformation of statements*’²³ (1972: 130). The archive is a specific regulating system, which gives statements their possibility to emerge (or survive). These statements, as both events and things and as part of this archival practice, create a network of rules.

Foucault often discusses statements in relation to discourse. But to stress once more, discourse for Foucault is not just the way ‘people talk, or things said in the past’, nor something that can be analyzed as being the dominant thinking of a specific period (as often being the case in linguistics). Rather, it is the materiality of a specific discursive formation as part of his methodology, and not some transparent counter movement of history. In short, his goal is not so much to look for the deeper meaning of discourse, or its ontology, but rather to observe which conditions are needed for a meaning to exist. Foucault approaches discourse as a multiplicity of specific statements, which are controlled and transformed by the archive.

‘Between the *language (langue)* that defines the system of constructing possible sentences, and the *corpus* that passively collects the words that are spoken, the *archive* defines a particular level: that of a practice that causes a multiplicity of statements to emerge as so many regular events, as so many things to be dealt with and manipulated. It does not have the weight of tradition; and it does not constitute the library of all libraries, outside time and place; nor is it the welcoming oblivion that opens up to all new speech the operational field of its freedom; between tradition and oblivion, it reveals the rules of a practice that enables statements both to survive and to undergo regular modification. It is *the general system of the formation and transformation of statements*’ (1972: 130).

²³ Italics in original.

Thus, Foucault is not after invisible counter movements in history, nor propositions, truths or untruths, intentions or sentences. Returning to the document/monument relation he introduces at the beginning of his book, one can argue statements could be approached as events or things that become the foundations of history, eventually becoming *monuments*. Later on in his book, Foucault returns to this document/monument relation, explaining that with archaeology he ‘tries to define not the thoughts, representations, images, themes, preoccupations that are concealed or revealed in discourse; but those discourses themselves, those discourses as practices obeying certain rules’ (1972: 138). He argues one should not treat discourse as a document, but as a monument. With this he suggests discourse does not refer to something that happened outside of itself (in the case of the document), but as something within itself, as being inherent to discourse (as a monument). The document is a ‘sign of something else, an element that ought to be transparent, but whose unfortunate opacity must often be pierced if one is to reach at last the depth of the essential in the place in which it is held reserve’ (1972: 138). Archaeology, he suggests, is ‘concerned with discourse in its own volume, as *monument*’ (1972: 139).

The general archive system

Foucault uses the term archaeology to describe all searches uncovering the archive. This uncovering is never completed and will never be wholly achieved, but forms the general horizon to which the description of discursive formations belongs.

‘[Archaeology] does not imply the search for a beginning; it does not relate analysis to geological excavation. It designates the general theme of a description that questions the already-said at the level of its existence: of the enunciative function that operates within it, of the discursive formation, and the general archive system to which it belongs. Archaeology describes discourses as practices specified in the element of the archive’ (1972: 131).

Using this idea of the ‘general archive system’, one could distinguish a literal and a metaphorical idea of the archive. The general archive system regulates ‘the rules of a practice that enables statements both to survive and to undergo regular modification’ (1972: 130). In the distinction between the literal and the metaphorical archive, it seems contradictory to call the latter more material. But the general archive system regulates the material-discursive enunciability of certain views and knowledge. The metaphorical archive (the monument) is more material than the literal (the document) because it constructs the conditions in which this regulating principle exists.

Is the digital database analyzable as document/monument, or even as regulating archive? And in a way, are algorithms the contemporary regulating systematic? The digital database and its algorithms can function as a general archive system in the sense that neither of them are concerned with a specific field of knowledge, a discursive formation, but rather have interfaces with the material

world, and determine the material-discursive enunciability. The archive, or general archive system in Foucauldian sense, is comparable to the algorithms that make specific database combinations (statements) possible (or impossible). Take for instance cultural forms such as Facebook and Google. The algorithm passively collects and processes ‘words that are spoken’ (input of its users). These are aggregated data and can be seen as the paradigm. This paradigm then, enables and disables specific syntagms, cultural forms.

Manovich tries to make a similar analysis, but falls back to a literal archive: Vertov’s film as database. For Foucault a document can never only be a syntagm, because he searches for specific things within the material practice. Manovich begins promisingly, arguing that ‘[d]atabase (the paradigm) is given material existence, while narrative (the syntagm) is dematerialised’ (2001: 231). However, after the construction of this material imaginary, Manovich turns his analysis around once more – focusing on new media as different interfaces to a database and thus returning to the narrative approach again – while Foucault approaches the archive as a condition for the materiality of regularities (either an interface, syntagm, or system). Manovich does not recognize this condition, and therefore remains on the surface. The archive according to Foucault should be opened through archaeology. The archive, then, in a way, is a metaphor for this material ordering of discursive formations. The archive is that what is carved out, in a theoretical or methodological way. The rules of practice (of the archaeologist) are to unravel the archive as a system; something he has to analyze bit by bit in order to reveal its rules of practice. Therefore one could argue Foucault performs an archaeology of the archive: ‘archivology’. When extending this line of thought to the database and its algorithms, one could say that by using ‘Foucauldian archaeology’ one is ‘hacking’ the database in order to unravel its algorithms. This can be seen in light of the ‘material turn’ in which theoretical studies turned towards the material aspects of everyday culture. This turn emerged as a reaction to the ‘immaterialization’ of the contemporary world. Of course this is more the ‘myth of the immaterial’ rather than an actual immaterialization of culture (Van den Boomen et. al. 2010: 9-10). In other words an archaeology of the ‘immaterial’ database, in order to reveal its algorithms.

The database as discursive formation

By analyzing truth claims that emerged during different epochs, Foucault tries to avoid interpretations and focuses on discursive practices. What if we approached Manovich’s database as such a discursive formation? Discursive practices are material practices, and monuments can arise within such fields of regularities. In the Foucauldian sense, archaeology actually is ‘archivology’: the analysis of history, with of course also physical documents but most of all statements, events, and monuments.

Documents become monuments, and can be analyzed in a material way. Taking this idea of the Foucauldian monument, and relating it to Manovich’s use of De Saussure semiotics and the shift he recognizes from the narrative to the database, we can make some interesting suggestions. Like

Manovich argued that '[o]n the material level, a narrative is just a set of links; the elements themselves remained stored in the database (2001: 231), Foucault could have argued that on the material level, the document is just a selection of linguistic relations/links; the elements themselves (discourses) remained stored in the monument. This said, one could argue the monument is comparable to the archive; as it consist of regularities and can be approached as paradigm.

Also, by comparing Manovich's syntagm/paradigm relation (within his framework of the narrative and database) with Foucault's mapping of the document and monument, one might argue the following. The document can be put in line with the narrative (as being an immaterial language paradigm and a materially articulated syntagm) and the monument can be approached as a database (including a material data paradigm and an immaterial combining syntagm). Thus, by analyzing the database as cultural form, in Foucauldian sense, we could argue we can approach the database as archive.

The question concerning this chapter was whether or not Foucault's notion of the archive (as being a system of different kinds of discursive formations) can be put in line with Manovich's ideas of the narrative and database as cultural forms of expression. It seems a few similarities between both scholars can be drawn, but unlike Foucault, Manovich seems to miss the importance of the 'systematical' regulations and algorithms of the general archive system/database. In order to analyze if, and in what way, thinking and knowledge has changed with the emergence of the digital database as cultural form of expression, a different approach to the archive will be used. Jacques Derrida, who has written much of his work in the same period as Foucault, evolves his philosophy around the ontology of the archive, and its synchronous developments, in contrast to Foucault's historical and diachronic analysis of the archive. The distinction between the literal and the metaphorical archive is what we will take with us to the next chapter. Although the Derridian approach will have a different focus, we could make a similar distinction: Derrida's use of the *Freudian archive* as literal archive approach, and his introduction of *archive fever* as the metaphorical side of the same coin. Could it be that Foucault's material practice of the archive – the general archive system – can be put in line with Derrida's ontological unraveling of his archive fever? And what if we approached Manovich's database as such a general archive system, from Derrida's ontological perspective? Could it be that this 'archive fever' has adjusted itself to its digital environment? Are we, in this digital age, 'infected' by a database fever?

3. THE ARCHIVE AS ARCHITECTURE

In the first chapter Manovich's idea of the digital database is introduced as being a new cultural form of expression. He recognizes a shift from the narrative to the database as cultural form, but when it comes to a detailed analysis of the materiality of the database he remains superficial (that is, on the interface, which is a syntagm filter). Digital databases have become a prominent phenomenon of digital culture, and it is important to theorize them as a research topic. In chapter two I made such an analysis from the Foucauldian perspective of the archive, now it is time to introduce another perspective, the one of Derrida.

Although Derrida's work originates from the same period as Foucault's, they both have very different views on the concept of the archive. The goal of this chapter is not to point out if and in what way they contradict each other, but rather how both perspectives can contribute to the analysis of digital databases as a cultural form. Foucault can be seen as a philosopher analyzing history in a diachronic way, focusing on historical changes that can be revealed by an archaeological approach of the archive, while Derrida researches the archive in an ontological and synchronous way. This chapter will focus on Derrida's ontological unraveling of the archive and will research in what way his findings can be put in line with Manovich's idea of the database as a cultural form of expression, and Foucault's idea of the archive as a general archive system.

Initially the focus of Derrida's *Archive Fever* seems to be the question of the archive and memory, as 'applied' to psychoanalysis and its history, but when taking a closer look, the interest in a more general topic is revealed, that of the relationship between truth and authority. Derrida ascribes this kind of authority to the exteriority of the archive. For him it is important to focus on its architecture, in order to find institutional power structures that are inherent to the archive. Although not explicitly discussed in the previous chapter, Foucault, especially in his later works such as *Discipline and Punish* (1975), focuses on these institutional powers as well. In *The Archaeology of Knowledge*, one can already trace this interest in his way of approaching the archive as a general system, and in his way of approaching statements as events or things that can arise because of such a system.

What must be stressed is that Derrida's philosophy is constantly mixed with Freudian terminology, and sometimes it is hard to distinguish between Freud's thinking and his own. This is because on one hand Freud's psychoanalysis, or the physical Freudian museum, is used as a sort of case study, while on the other hand, Derrida seems to implement some Freudian concepts, such as the 'death drive', in his own work as well. It must also be noted that *Archive Fever* is structured in an unusual way. First, Derrida starts with four different forewords²⁴ (covering 81% of the book), followed by one chapter, called 'Theses' which is actually no more than a recapitulation of the earlier four

²⁴ One 'nameless' foreword, an exergue, a preamble, and an actual foreword.

chapters (only covering 12% of the book), and at last a short 'Postscript' (just 7% of the book). With this layout including false starts, reserves, and circling movements, Derrida already makes a statement. As will become clear in this chapter, this odd structure is his way of showing the complexity of the archive.

Preface

The first foreword covers only five pages, but contains enough to think about for a whole thesis. Derrida immediately starts off with a linguistic analysis of the word 'archive'. The word 'archive' is derived from the Greek *arkhè*, which refers to both *commencement* – beginning or origin, and *commandment* – order or law (Derrida 1995: 1):

'[The term archive] indeed refers, as one would correctly believe, to the *arkhè* in the *physical*, *historical* or *ontological* sense, which is to say to the originary, the first, the principal, the primitive, in short to the commencement. But even more, and *even earlier*, "archive" refers to the *arkhè* of the commandment. As is the case for the Latin *archivum* or *archium* (a word that is used in the singular, as was the French *archive*, formerly employed as masculine singular: *un archive*), the meaning of "archive," its only meaning, comes to it from the Greek *arkheion*: initially a house, a domicile, an address, the residence of the superior magistrates, the *archons*, those who commanded' (Derrida 1995: 2).

From both commencement and commandment, a lot of series and parts of orders can be derived within our lexicon (Derrida 1995: 1). Instead of focusing on the practice of the archive as a system, like Foucault, Derrida approaches the *arkhè* as a principle. These principles however, are innumerable and inherent to the *arkhè* and are hard to get a grip on.

According to Derrida's analysis of the Greek, citizens with political power were considered to have the right to make and represent the law. Documents were filed inside their home (a private place) and publishing the documents was a way of the *archons* to show their authority. They were the guardians of the documents, but beside ensuring security of these documents, they also gained hermeneutic rights and competence, and they had the power to interpret the archive. 'Even in their guardianship or their hermeneutic tradition, the archives could do neither without substrate nor without residence. It is thus, in this *domiciliation*, in this house arrest, that archives take place' (Derrida 1995: 2).

Derrida stresses that such domiciliation, the constant dwelling from private to public (which does not always mean from secret to non-secret), is what takes place (1995: 3). As an example he uses

Freud's last house, his home that has become a museum (the passage of one institution to another)²⁵. Although the architecture of Freud's house has not literally changed – the space has not been adjusted or reformed – its laws and singularity, its nomology, have changed because it became public. He argues:

‘At the intersection of the topological and the nomological, of the place and the law, of the substrate and the authority, a scene of domiciliation becomes at once visible and invisible’ (Derrida 1995: 3).

With this topo-nomological function of the archive Derrida does not imply that the archive only has to be deposited somewhere. The archontic power that gathers functions such as unification, identification, and classification, must be paired with what he calls ‘the power of consignation’. He explains:

‘By consignation, we do not only mean, in the ordinary sense of the word, the act of assigning residence or of entrusting so as to put into reserve (to consign, to deposit), in a place on a substrate, but here the act of *consigning* through *gathering together signs*. It is not only the traditional *consignation*, that is, the written proof, but what all *consignatio* begins by presupposing. *Consignation* aims to coordinate a single corpus, in a system or a synchrony in which all the elements articulate the unity of an ideal configuration’ (Derrida 1995: 3).

Where Foucault approaches the archive as a general system of rules, law and ordering, Derrida acknowledges these nomological characteristics of the archive, but argues that topology, a place, and/or a domiciliation are equally important. Where Foucault suggests that the archive is a system of formation and transformation of statements, Derrida approaches the archive as ‘a principle of consignation, that is, of gathering together’ (Derrida 1995: 3). Derrida's topo-nomological consignation in which signs are gathered to coordinate a unity, a configuration of elements, is actually another way of saying – as Foucault did – that in the archive, statements as events and as things, are gathered together in order to form a general archive system, a transformation and configuration of statements/elements.

Derrida argues that ‘the documents, which are not always discursive writings, are only kept and classified under the title of the archive by virtue of a privileged *topology*’ (Derrida 1995: 3). Since for Derrida, documents are ordered by virtue of a privileged topology, the document becomes a monument when it is materialized through this topology. Because of the materiality of Derrida's topo-

²⁵ Notice the shift from Derrida's own linguistic unravelling of the general archive, to one specific and physical archive: Freud's last house.

nomological architecture, in a Foucauldian sense, documents can gain their intrinsic description and become monuments.

Archive Fever is an attempt to reveal the truth about Freud and his psychoanalysis.

Psychoanalysis itself claims to have a special understanding of memory and hidden memories. It shows how hard it is to write about psychoanalysis and memory without falling into infinite loops or logical errors. In this first foreword, Derrida points out that the prefix *Archè* (inherent to both the archive and architecture) represents an origin in both ontological (where it began) and nomological (where it derives its authority from) sense. The intention of Derrida of this first foreword is to map the Freudian signature, his impression, on firstly Freud's literal archive, secondly, the concept of the archive, and thirdly, archivization (as historiography) (Derrida 1995: 5).

Exergue

The second foreword discusses the violence of the archive itself – archival violence (Derrida 1995: 7). For Derrida, the archive has a double sense; it 'is at once *institutive* and *conservative*. Revolutionary and traditional' (1995: 7). Here, Derrida focuses on the literal archive, Freud's house:

'it keeps, it puts in reserve, it saves, but in an unnatural fashion, that is to say in making the law (*nomos*) or in making people respect the law. A moment ago we called it nomological. It has the force of law, of a law which is the law of the house (*oikos*), of the house as place, domicile, family, lineage, or institution. Having become a museum, Freud's house takes in all these powers of economy' (Derrida 1995: 7).

In order to refer to such functioning of archival economy, Derrida points out that there are two places of inscription: *printing* and *circumcision* (Derrida 1995: 8). The first, printing, is more typographical. Typography is entrusted to the outside of the archive, an *external* substrate (Derrida 1995: 8). The Freudian lexicon:

'stresses a certain "printing" technology of archivization (*Eindruck, Druck, drücken*), but only so as to feign the faulty economic calculation. Freud also entrusts to us the "impression" (*Empfindung*), the feeling inspired by this excessive and ultimately gratuitous investment in a perhaps useless archive [...] this is a lot of ink and paper for nothing, an entire typographical volume, in short, a material substrate which is out of all proportion, in the last analysis, to "recount" (*erzählen*) stories that everyone knows' (Derrida 1995: 8-9).

That said, Derrida argues that Freud is not actually worrying about 'a waste of paper and ink'. Freud uses these questions about the material waste of typographical tools as sort of rhetorical trick – as if

they are ‘self-wasting’. After all, Derrida argues, Freud’s aim was to put forward the hypothesis of the ‘death drive’, which for Freud is actually not a hypothesis, but an irresistible thesis. Derrida uses Freud’s term ‘death drive’ in order to explain that there is an inherent drive of loss and destruction within the archive. Death drive ‘is at work, but since it always operates in silence, it never leaves any archives of its own. It destroys in advance its own archive, as if that were in truth the very motivation of its most proper movement’ (Derrida 1995: 10).

On one hand, Derrida recognizes Freud’s elusive ‘death drive’ as something that is ‘at work’ and ‘operates in silence’ (Derrida 1995: 10). On the other hand, he discusses a ‘materiality of archivization’ in the most literal sense of the word: as material substrate of ‘self-subversion’ (death drive), rather than a working principle (or system in terms of Foucault). Here he focuses on typography, as a material media specificity that can be seen as the exteriority of an archive. Or, in his own words: ‘*There is no archive without a place of consignation, without a technique of repetition, and without a certain exteriority. No archive without outside*’²⁶ (Derrida 1995: 11). This is because its exteriority or consignation makes sure that memorization, repetition, reproduction, and re-impression are possible. He also stresses that repetition itself, its compulsion, according to Freud, remains indissociable from the death drive, and thus from deconstruction (1995: 11-12). This death drive is always at work and aims at causing a forgetting of the monument (and thus a forgetting of the medium). For instance, the interface (a syntagm) aims at causing a forgetting of the database as paradigmatic monument.

The three keywords of the quote above, *consignation*, *repetition*, and *exteriority*, can be related to the idea of the database as archive. First of all, *consignation*: the database is a corpus that aims to coordinate itself as a sort of system, or synchrony, or architecture. The data are presented as a ‘unity of an ideal configuration’ (Derrida 1995: 3). Secondly, although representing a unity, the database remains a collection of singular data that can be combined and recombined through different interfaces, assignments, or search requests. Just like Manovich argued that although the narrative is still privileged as interface in contemporary culture, other interfaces are equally executable. This said, the database, like the Derridian archive, has multiple techniques of *repetition* and of forgetting. Lastly, although one can have the tendency to forget the database, since it operates in silence ‘behind the scene’ (that is, in the algorithms behind the interface), it still remains the foundation of a medium. It is the basis, the *exteriority*, the ‘outside’ (or architecture) of the medium it represents. Also in case of the database, the constantly ‘at-work’ death drive aims to cause a forgetting of the database (the monument), and thus also a forgetting of the medium (the document).

Here, one could find some similarities between Foucault’s monument/document relation, and the distinction between Derrida’s use of the literal Freudian archive and the metaphorical ‘archive fever’. For Foucault, the general archive system can be approached as a metaphor and can be seen as

²⁶ Italics in original.

regulating the material-discursive enunciability of certain views and knowledge. The metaphorical archive (the monument) is more material than the literal (the document) because it constructs the conditions in which this regulating principle exists. In a same vein of thought, one could argue that Derrida's metaphorical archive (archive fever, as principle) is more material than the literal (Freud's archive) because it constructs and deconstructs the conditions in which an archive (and thus, 'broken', deconstructed memories) can exist.

Foucault speaks of discursive practices (fields of regularities) as material practices in which monuments can arise. In the Foucauldian sense, documents have become monuments and can be analyzed in a material way. Derrida seems to focus on technical developments as well. However, by stressing different words and emphasizing different parts of their philosophy, Foucault and Derrida are pretty much on the same page. Both scholars focus on materiality, archaeology, architecture, and the archive as law. But Derrida seems to be more explicit when it comes to the materiality of the medium of inscription. He takes into account new technical developments and wonders:

'Freud did not have at his disposition the resources provided today by archival machines of which one could hardly have dreamed in the first quarter of this century. Do these new archival machines change anything? Do they affect the essentials of Freud's discourse?' (Derrida 1995: 14).

What Derrida suggests here, is to perform a sort of 'retrospective science fiction': what if Freud had a printer, or a fax? However, such an analysis is not possible, and of course Derrida is aware of this fact. Derrida calls such retrospective science fiction a mechanical remark, an archival earthquake, which would not only have an effect on secondary recording of the printing and conservation of the history of psychoanalysis, but would also 'have transformed this history from top to bottom and in the most initial inside of its production, in its very *events*' (Derrida 1995: 16).

Whatever technique is used, both Foucault and Derrida search for the intrinsic inscription of the monument's documents in the archive. Unlike Foucault, Derrida recognizes that the way in which such memories or histories are archived, depends on the media that are used at the point of archiving: 'the technical structure of the *archiving* archive also determines the structure of the *archivable* content even in its very coming into existence and in its relationship to the future' (Derrida 1995: 17). Derrida argues that the archiving technique is important in the way memories and histories are constructed. With this technique, the archive's materiality, exteriority, or architecture is captured. This can be seen in his writing about the Internet. Although his work descends from a period in which the public use of the Internet was at its very beginning, he already recognized the huge impact of Internet and e-mail for society and culture:

‘because electronic mail today, even more than the fax, is on the way to transforming the entire public and private space of humanity, and first of all the limit between the private, the secret (private or public), and the public or the phenomenal’ (Derrida 1995: 17).

In terms of Derrida, e-mail is more than just technology. It can be seen as ‘rhythm, in quasi-instantaneous fashion, this instrumental possibility of production, of printing, of conservation, and of destruction of the archive’ (1995: 17). Technique, here the technique of e-mail, is more than just technique in the limited sense of the word. For Derrida, the archive as technique is always accompanied by a juridical or political transformation. ‘[A]rchival technology no longer determines, will never have determined, merely the moment of the conservation recording, but rather the very institution of the archivable event’ (1995: 18). This also goes for the database, which is inevitably also a juridical and political transformation. The database as an archive is dependent on the institution (for instance the government, Facebook, or Google) that records things or events and captures them as data – as the monument’s documents. By being either a digital database or a more traditional archive, institutions, power, and authority will always be part of the database’s/archive’s ontology. Where Foucault argues these power structures are part of the system of the archive, Derrida would have argued that by unraveling its structure, some of these power structures might be revealed. The intrinsic description of the database, its algorithms, can be revealed, but not all at the same time, in its totality, since its inherent death drive will aim to cause a forgetting of its content.

As I introduced at the beginning of this paragraph, we have just discussed the typographical *printing*. Now let us shortly describe the second part of the exergue: the *circumcision*. This second part is mainly interesting because Derrida introduces the term ‘sedimented archives’. Although not literally using the word archaeology as Foucault, this is actually what Derrida performs. He argues that the archive should be approached as consisting of different layers. Some are written right on a ‘body’, others form the substrate, or exteriority of a ‘body’ – a physical fundament (Derrida 1995: 20). Foucault argued that archaeology first sought to become history, but now history should strive to become archaeology. According to Derrida too, the archive should be unraveled in an archaeological way. And where Foucault uses archaeology as metaphor for ‘archivology’, Derrida seems to use his way of approaching the archive as architecture as a metaphor for an archaeological unraveling of the ‘sedimented archive’.

Although Derrida’s work descends from the same period as Foucault’s, he seems to be more ‘open-minded’ for other techniques of archiving. By this I do not mean Foucault is superficial when it comes down to archiving techniques, but more that it is remarkable how Derrida’s seems to let go of the typical twentieth century notion of the archive. He argues that ‘what is no longer archived in the same way is no longer lived in the same way. Archivable meaning is also and in advance codetermined by the structure that archives’ (Derrida 1995: 18). Just like Foucault, he lived in a period in

which printers, mystic pads²⁷ and handwriting bloomed, and in which the emergence of e-mail and fax slowly began their public invasion. Where Manovich recognized a shift from the narrative to the database as cultural form of expression, Derrida could have argued a shift had taken place from handwriting or typewriters, to electronic mail and fax in which ‘copyability’ became the central element of the new cultural form of expression. Every archiving technique, for Derrida, is determinant for the way things or events are captured and preserved. But although every new development or period will have its own features, a new or different technique of recording, this does not immediately imply a new cultural form of expression. Rather, new ways of recording the monument’s document, and with that, new ways to unravel the intrinsic inscription of these documents should be developed.

The preamble and the actual foreword

The third foreword, the preamble, only covers a small seven pages of the book and is about the three definitions Derrida ascribes to the word *impression*. Firstly, he writes about the *scriptural* or *typographical* impression, which is about the marks it leaves on the surface, or in the thickness of a substrate (1995: 26). Secondly, he discusses the ‘Freudian impression’ in which the archive is only a notion, not a concept ‘an impression associated with a word’ (1995: 29). And thirdly, he mentions the ‘impression’ left by Freud (1995: 30).

After this ‘preamble’, Derrida begins with his actual foreword, in which he ‘starts off with concluding’ – a typical trick only Derrida can pull off – that we can no longer ask questions about the concept, the history of the concept, and the concept of the archive. ‘No longer, at least, in a temporal or historical modality dominated by the present or by the past’ (1995: 33). In this last foreword, Derrida’s aim is to show that nothing about the archive can be taken for granted. According to him, we do not have the right to ask questions about forms, grammar, or lexicons. Although they seem legitimate or neutral, everything is interpreted from a certain disposition. No unities, homogeneities, consistencies or relationships can be assured of any concept to any term or to such a word as ‘archive’ (Derrida 1995: 33).

‘the question of the archive is not, we repeat, a question of the past. It is not the question of a concept dealing with the past that might *already* be at our disposal or not at our disposal, *an archivable concept of the archive*. It is a question of the future, the question of the future itself, the question of a response, of a promise and of a responsibility for tomorrow. The archive: if we want to know what that will have meant, we will only know in times to come. Perhaps’ (Derrida 1995: 36).

²⁷ Toy, consisting of a plastic sheet that covers a waxen board. By writing on it with a pointed instrument, the pressure leaves a dark trace in the wax through the plastic. After lifting the plastic the trace disappears and the pad is empty again. This is the ‘magical quality’ of the pad. Freud used this technique to argue that although the drawings seem to disappear when the plastic is moved, some of its initial traces will remain. According to Freud, this is how ‘the psychic apparatus’ functions as well.

This also goes for the database, which is always under construction and is never a question of the past, but rather a question of what will happen to one's data in the future. It is a system, or a principle. Or one might argue, in Derridian terminology, the question of the database is not a concept dealing with the past, '*a data based concept of the database*' either. It is a promise of a future data based combination that we can only get to know in times to come. And then still, it will only be focused on the future.

Derrida tries to point out the archivable concept by means of the written/printed document and the 'apparent' importance of structure. Although we have a certain idea of how the structure of a book, or oeuvre, should look like, by structuring his own work in a totally unconventional way, Derrida tries to reveal a little of the principle of the archive. In a digital age, we do not have documents with inscriptions, physically written down or printed on paper. However, we do have digital documents – database records. Somebody – either a person, for example a programmer, or some computer specification – is the first 'archivist', instituting/establishing a digital 'document'. These archons have privileges others might not have, such as the ability to read, classify, and/or save these inscriptions. They can be the archaeologist, might have the ability to adjust content, or institutionalize it. Taking Derrida's example of the several forewords with us to this digital age, we can find similar circling movements and false starts, but we might not recognize them as such. In other words, we *do* have several different preambles before we can do anything on a computer or the 'web-archive'. We have to agree with several Terms of Services (ToS), register for an Operating System (OS) license, own different software packages, master different languages, and acquire several database privileges. In an age of digital databases, data is rearranged and expressed through different interfaces, just like he tries to show through his many forewords.

Derrida finishes this last foreword by concluding that there would be no future without repetition and death drive. 'Without this evil [death drive], which is also *archive fever*, the desire and the disorder of the archive, there would be neither assignation nor consignation' (Derrida 1995: 81). Archive fever is already taking care of the archive's future writing, and at the same time its future forgetting. Although unlike the traditional archive, the digital database still has this inherent death drive. Archive fever (or database fever) is already taking care of its future becoming and forgetting. Or, in a similar vein of thought, economy and/or politics can institutionalize data as being digital inscriptions – as the database's future writing.

Theses

After these four forewords, one should get all excited about finally arriving at the core, or so it seems, of Derrida's argument. But in reality this chapter is no more than a recapitulation of the four previous 'chapters'. In this chapter, Derrida turns to the spectral position of the Freudian archontic principle. He argues that nothing about the archival concept is certain. 'Freud's discourse on the archive, and here is

the thesis of the theses, seems thus to be divided. As does his concept of the archive' (Derrida 1995: 89). Derrida argues that nothing is less reliable than the word 'archive', and this is not only because of the two orders of *arkhè* as introduced at the beginning of his book. 'The archive always holds a problem for translation' (Derrida 1995: 90). Approaching the database as archive delivers the same problem: just like the archive, the database is hard to translate. Approaching it either as a system, or as a principle, or even as being something exterior with different sediments of inscription, might cause some compatibility problems. This will mainly shine through in the two orders of 'materiality' Manovich discusses, one of which is very material in the literal sense of the word, as counterpart of immateriality. The other is a more metaphorical concept. Foucault mainly discusses the second materiality. Derrida is somewhere in between Manovich's and Foucault's approaches and might even function as the glue between both perspectives.

Postscript

In this last part of his book, Derrida returns to Freud's spectral search for the 'originary origin' – or in other words, the ontology of ontology.

'When he [Freud] wants to explain the haunting of the archaeologist with a logic of repression, at the very moment in which he specifies that he wants to recognize in it a germ of a parcel of truth, Freud claims again to bring to light a more originary origin than that of the specter. In the outbidding, he wants to be an archivist who is more of an archaeologist than the archaeologist' (Derrida 1995: 97).

With this quote both Foucault's as well as Derrida's intention of how to handle the unraveling of the archive can be summarized. Where Foucault focused on the archaeology of the archive, Derrida draws the attention to the architecture of the archive. And although Foucault names it 'archaeology' he actually performs 'archivology', while most of the time, Derrida focuses on the archive's structure, its 'architecture', but actually in an archaeological way. In a way then, Derrida concludes what Foucault performs: he searches for an archaeology of the archive's architecture – its origin – stressing the monumental aspect of the archive, rather than approaching it as a document (although one must not forget he constantly mentions inscriptions, representations, and implications of archived documents). The other way around, we could also argue that Foucault concludes what Derrida performs: by use of his archaeological method, he tries to unravel the 'sedimented archive', the archive's structure – its architecture. Now that we have come to the conclusion that Foucault and Derrida's theories are very compatible, we can draw some conclusions about the database as a cultural form of expression from the perspective of these poststructuralist approaches.

CONCLUSION

During the formation of this thesis, multiple questions are asked and have remained unanswered. Now the time has come to put our finger on these questions and draw some conclusions. The initial question concerning this paper was whether the ‘digital’ in the archive has changed it as a cultural form. In order to frame this general idea of the archive, I limited myself to the archival concepts of Foucault and Derrida. Both scholars have been (and still are) very influential when thinking about the archive. In order to combine their ideas with digital culture, I involved Manovich’s ideas on the digital database. Eventually the following questions arose: *What new insights can be gained if we analyze digital databases in terms of Foucauldian and Derridian archives? Can they indeed be called a new cultural form (in terms of Manovich), or should we speak of the old cultural form in another material reconfiguration? To what extent are the poststructuralist philosophies of Foucault and Derrida still useful when it comes to digital forms, in other words what gains can be added by their theories to Manovich’s rough thesis?*

In short, Manovich argues that the database has come to replace the narrative as a cultural form of expression. According to him, new media have changed the relation between materiality and virtuality, because thinking and knowing are now based on data based forms which are different from the traditional narrative form. He underpins this argument with De Saussure’s semiotics through which he recognizes a shift in the relation between the syntagm and the paradigm. In times of the narrative as a cultural form of expression, Manovich argues the narrative emerged as a syntagm (a combination of signs, linear sequence, something that is present and explicit or real), and the available language of the author as a paradigm (as a set within a language, or a group, something that is absent and implicit or imagined). One could argue that the construction of a traditional narrative is a materialized syntagm, selected from a virtual paradigmatic ‘database’ of choices. In a schematic:

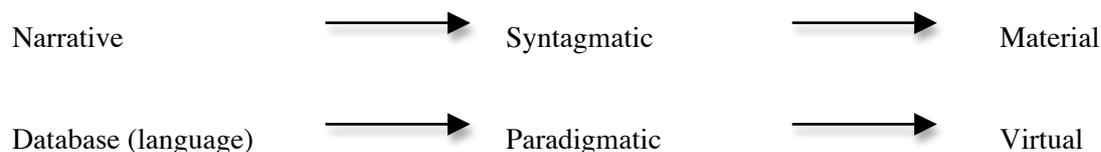


Figure 1: The narrative-database relation before the emergence of the ‘new media age’.

In new media this relationship is reversed. ‘Database (the paradigm) is given material existence, while narrative (the syntagm) is dematerialised. Paradigm is privileged, syntagm is downplayed. Paradigm is real; syntagm, virtual’ (Manovich 2001: 231). The data based form changes the relation between syntagm and paradigm, as visualized in figure 2.

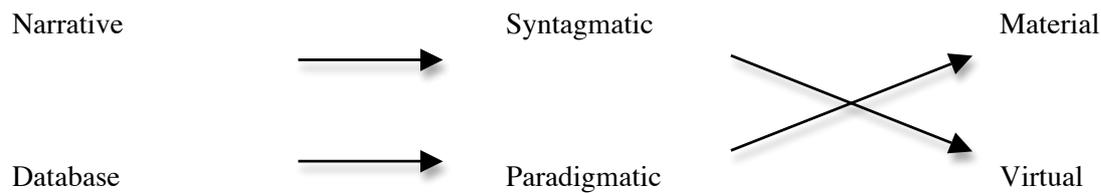


Figure 2: The narrative-database relation after the emergence of the 'new media age'.

In the semiotic relation as coined by De Saussure, the paradigmatic axis is virtual, absent and imagined; the syntagmatic axis is 'material', present and real (physical). Now, in the age of new media, Manovich argues that the database is still paradigmatic, but also material. For De Saussure, language is paradigmatic and virtual, the narrative is a syntagmatic material articulation of this language. In the case of the database, the paradigm is more material because it is stored somewhere; the syntagm becomes more virtual because it is focused on possible outcomes.

However, after the visualization of his work in figure 2, we could ask ourselves why Manovich remains focused on these two cultural forms of expression, rather than on this reconfiguration of materiality that has taken place. I find it disappointing that although Manovich seems to touch this interesting change in materiality, he soon falls back to what he wants to conclude, namely that a shift has taken place from one cultural form of expression to another. In my opinion it is more plausible to argue that since both cultural forms of expression (narrative and database) already existed, it might be a little exaggerated to suggest that a whole new cultural form of expression has to be introduced. Rather, the materiality of and the relation between both forms underwent a material reconfiguration. By using the work of Foucault, this argument will be supported and new insights can be gained in Manovich's analysis of the digital database.

Sometimes Foucault literally discusses archives, but most of the time he uses a more metaphorical notion in which he approaches the archive as a system of rules, law, and ordering. This is notable in his approach of the document-monument relation. According to Foucault, the document is the physical fixation of historical writing, but is soon intermingled with the concept of the monument, giving the document material existence. In other words, Foucault approaches history as documents that are transformed into monuments, i.e. as being material discursive practices. His archaeology is a discipline that is devoted to these monuments. He approaches the archive as a controlling system, and this system should be opened through archaeology. In chapter two we already discussed what would happen if we approached the database as a discursive formation. Discursive practices are materialized and monuments can arise within such fields of regularities. Foucault argued that documents become monuments, and can be analyzed in a material way. I suggested that when Manovich argued that '[o]n the material level, a narrative is just a set of links; the elements themselves remained stored in the database (Manovich 2001: 231), Foucault could have argued that on the material level, the document is just a selection of linguistic relations/links: the elements themselves (discourses) remained stored in

the monument. That said, the document can be put in line with the narrative (an immaterial language paradigm and a materially articulated syntagm), and the monument can be approached as a database (including a material data paradigm and an immaterial combining syntagm). Let's combine Foucault's theory with the visualization of Manovich's thesis from Figure 2:

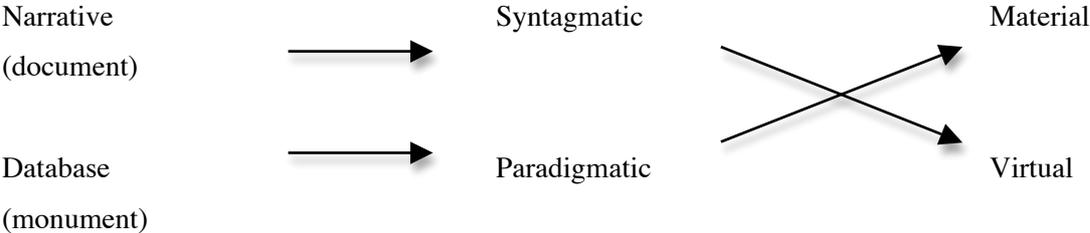


Figure 3: Foucault's document/monument relation added to Manovich's visualized thesis.

When adding the document-monument relation to the previous schematic like this, the ideas of Foucault and Manovich seem rather compatible at this point. However, this schematic does not fit Foucault's philosophy because he argues both the document and the monument can be material. In the following schematic will be visualized that, in Foucauldian sense, documents *can* become monuments, and then documents too, can be analyzed in a material way.

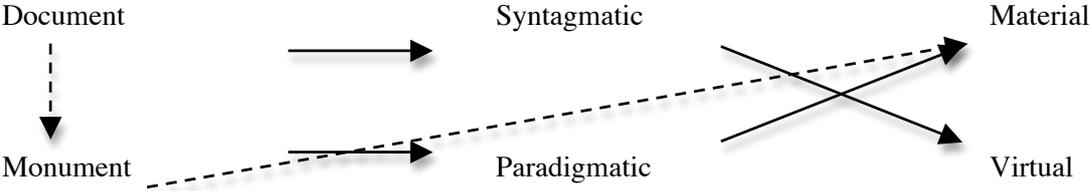


Figure 4: The 'becoming material' of the document in Foucauldian sense.

In his own words, Foucault prefers to approach the archive as a 'general archive system'. Within this system, Foucault can be said to distinguish a literal and a metaphorical idea of the archive. It might sound contradictory, however the metaphorical archive (the monument) is more material than the literal (the document), because it constructs the conditions in which this system, this regulating principle, exists. This metaphorical-literal idea added to the previous schematic:

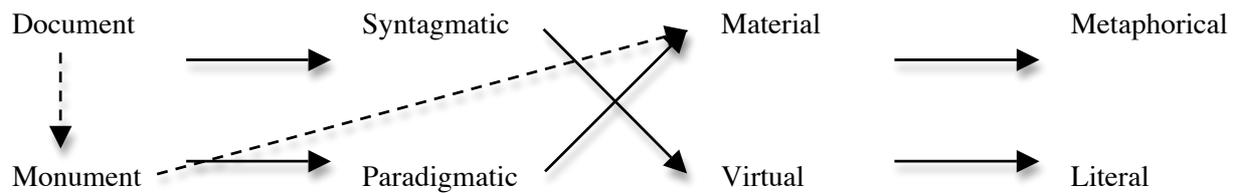


Figure 5: The metaphorical and literal approach of the archive added to Foucault’s document/monument relation.

As discussed earlier, we can make a connection between the general archive system and the database’s algorithms. Foucault distinguishes three parts in the semiotic sense. First language, a Saussurian paradigm. Second the corpus, a Saussurian syntagm. And third, the archive, which is a specific corpus, enabling and policing enunciations. However, when it comes to the database, the corpus of stored data become a paradigm; the possible combinations or results, become the syntagm. The algorithms define the archive, a specific corpus and system of law. I drew the following conclusion in chapter two: the archive – or general archive system – is comparable to the algorithms that make specific database combinations (statements) possible (or impossible), in the Foucauldian sense. However, unlike Foucault, Manovich remains focused on new media as different interfaces of a database (being stuck at the narrative level). Foucault takes this to a next level by approaching the archive as a condition for the materiality of regularities.

When it comes down to a detailed analysis of the materiality of the database (the databases algorithms, paradigms and syntagms) Manovich remains superficial. He seems to miss the importance of the ‘systematical’ regulations and algorithms of the general archive system/database. By using Foucault’s method, we can gain the following insights in the becoming digital of the archive as database. What if we performed a database-archaeology? By opening the database through archaeology we can pass the cultural level and can ‘break into the database’ in order to reveal its regularities and material practices. Let us for instance break into Facebook. Facebook as database is a paradigmatic corpus of stored data. We could argue it is concerned with a ‘specific field of knowledge’, a discursive formation. It is a corpus with a huge collection of data that, in combination with each other, can give an innumerable possibility of outcomes. For instance, an uploaded photo, tagged, commented on, and liked, is a way of constructing a possible syntagm. The algorithms of Facebook define it as a corpus, as a system of law and ordering. The algorithms determine the interface, but also what users can and cannot do. In Foucauldian sense, these algorithms can be approached as being the statement-things and –events of the database, its digital materiality. In order to focus on this materiality even more, we introduced Derrida’s deconstructive way of analyzing the archive.

With the use of Derrida’s work, new insights can be revealed when it comes down to the medium specificity of the database as a cultural of expression. He approaches the archive as structure, as architecture. For him, not only the nomological functioning of the archive (in the Foucauldian

sense), but also the archive’s topological features are important. Indeed, at first sight, the approaches of Foucault and Derrida, seem to be much more different than they in reality are. Contrasted in schematic:

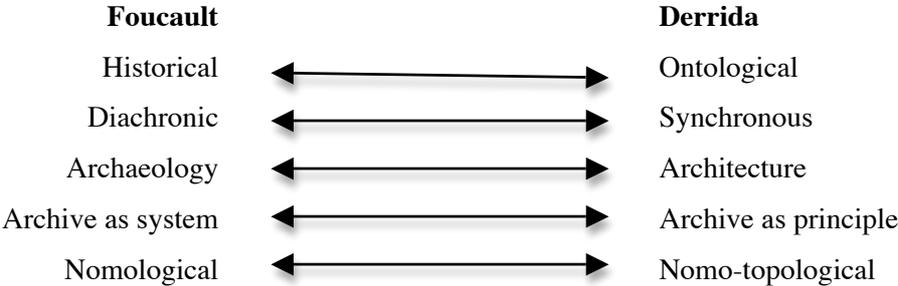
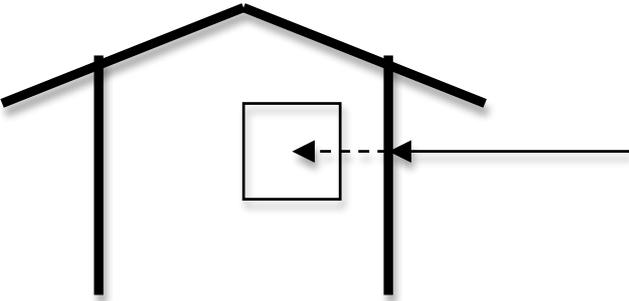


Figure 6: Terminological differences between Foucault and Derrida.

When taking a closer look however, both theories have pretty much in common. Indeed, what seems to differentiate both scholars are not so much their approaches, but rather their terminology. For instance, Derrida focuses on the architecture of the archive in order to find its inherent institutional power structures. This kind of interest can also be found in Foucault’s way of approaching the archive as a general system, and the way statement-events and statement-things can arise because of such a system. What if we took this ‘architecture’ of Derrida in the most literal sense of the word? Let us approach the archive as a ‘domicile’. Derrida focuses on the structure, the architecture, of this ‘house’ in order to reveal one of its institutional powers, the power of consignation (unification, classifications, identification). To visualize, let us call these inherent structures the ‘inventory’ for now.



Thus, Derrida focuses on the architecture, in order to reveal its ‘inventory’, to reveal what’s behind the walls. Metaphorically speaking, one could argue than one can peak through the window, but will never spot the whole inventory (in its totality) from that one perspective. No wonder, Derrida starts over and over with his forewords, he is just peaking through different windows, in order to get a grip the inventory in its totality.

Figure 7: Architecture and the general archive system.

Although less explicitly, Foucault actually states the same by arguing that we should approach the archive as a general system (here, the house), in order to reveal its inherent statement-things and

statement-events (its inventory). But at the same time, this house also forms and transforms its inventory. To take one step further, you cannot put your furniture ‘through’ the wall. The inventory – the statements, or the intrinsic description of the documents – is limited by the system, the architecture, or the structure that frames it. You can also trace this argument in Derrida’s way of structuring his own work. We have a certain perspective on how things should be, how books are structured, or how a house should be decorated.

As can be explained with the metaphor above, Foucault may not explicitly name it as such, he definitely takes the topological into account as well. Where Foucault argues that the archive is a system of formation and transformation of statements, Derrida approaches it as ‘a principle of consignation’. Derrida’s topo-nomological consignation in which signs are gathered to coordinate a unity, a configuration of elements, is actually another way of saying – as Foucault did – that in the archive, statement-events and statement-things that are gathered together in order to form a general archive system, a transformation and configuration of statements.

This topo-nomological functioning of the archive that Derrida describes can also be traced in Foucault’s document-monument relation. Foucault often introduces the document-monument relation in order to explain the change in the relation between archaeology and history. For Derrida, documents are ordered by virtue of a privileged topology, and become monuments when they are materialized through topology. Derrida’s focus on the archive’s topology is what we need in order to analyze Manovich’s idea of the database as new cultural form of expression. In his ‘archeological’ approach, Derrida takes into account the medium specificity of a certain archive. Foucault never discussed it as explicitly as Derrida. Therefore, Derrida’s approach has more interfaces with Manovich interpretation of the digital database (as archive) as cultural form. At a certain point Derrida performs a ‘retrospective science fiction’, a ‘what-if scenario’ concerning Freud’s literal archive and (for that period) future archival technologies. Derrida argues that technical developments can cause ‘archival earthquakes’. By this he means that developments not only have effect on secondary recording, but on the formation and transformation of history at the most initial inside of its production.

Manovich argues that the digital database, as new archival technique, slowly has come to replace the narrative as cultural form of expression. However, he argues, thinking and knowing is still saturated with this narrative form and therefore remains the most common interface-form to a database (Manovich 2001: 237). This conclusion of Manovich, is a rather bluntly cause-and-effect relation based on databases. Take for instance Google results as interface, which goal is to provide entrance to the Internet; or DNA-results, in order to cure diseases; or Facebook results, to find friends or to maintain friendships. This said, Manovich’s argument of the narrative as dominant interface of the database is not true anymore.

Not to forget, the inherent principle of the archive, its ‘death drive’, is still at work in the database as well. This fever of the database remains part of the archival form, also in its digital appearance. At the end of chapter two I asked myself whether ‘archive fever’ has adjusted itself to its

digital form. Now we could argue that instead of the statement-thing or -event, this fever is based on the database's algorithms and its data. With this transformation to the digital, we could argue 'archive fever' has become 'database fever'. Although the archive has reconfigured itself into the form of a digital database, it took this death drive and thus this fever with it. The database remains an archive, only in another appearance. Either data based or not, the death drive, and thus 'archive fever' will always find a loophole to survive. It is inherent to the archival form.

In sum, at the beginning of this essay we started off with framing the concept of the digital database within the terminology of Lev Manovich. Besides his main argument in which he suggested that a new cultural form of expression has arrived, he also recognized a material reconfiguration in the shift from the narrative to the database by using De Saussure's semiotics. However he does not appoint as much value to this finding and soon returns to his main argument of recognizing a shift in the use of cultural forms of expression. But this material analysis is what I found most striking in his work, and therefore I used it to examine a slightly other change namely, from the archive to the digital database. In the context of this change, it I came to the conclusion that (in the Foucauldian sense) it is more appropriate to speak of a material reconfiguration of the archive to the digital database, than to introduce a whole new cultural form of expression. Derrida more explicitly discusses the medium specificity of certain archives than Foucault, since he focuses on the impact of archival techniques. From his perspective, the introduction of a new cultural form of expression might not be wrong. He even argues an 'archival earthquake' occurred. The main difference between Manovich and Derrida's approaches is that Manovich argues that although a new cultural form of expression emerged, thinking and archiving is still influenced by earlier forms, while Derrida argues that archival techniques immediately have their impact on how events or things are memorized.

Thus, when approaching Manovich's database as a general archive system in the Foucauldian sense, and taking its medium specificity into account just like Derrida did in his architectural approach, Manovich rough thesis can be nuanced. In short, we should not speak of a database after a narrative as a new cultural form of expression, rather of a material reconfiguration of the archive in the form of a digital database, in which the archival technique is determinant for the way events are memorized.

EPILOGUE

The best way to describe this thesis is as a conceptualization of materiality in the becoming digital of contemporary culture. First of all I want to stress that within the scope of this thesis the goal was never to provide the reader with a complete overview of how to analyze databases in relation to the poststructuralist views of Foucault and Derrida. Rather I found it interesting to supplement Manovich's database theory with their concepts. The aim of this thesis was to find out whether the 'digital' in archives has come to change it as cultural form. To frame this question Manovich's concept of the digital database was used as 'case study'. His theoretical work functioned as point of departure.

Although having used the work of both Foucault and Derrida in earlier essays, I never had the time and/or space to use both theories in one paper. By analyzing Manovich's work through their perspectives, I finally had the chance to combine them in one thesis. Both scholars are generally accepted as major influential thinkers on the matter. By examining the work of Manovich (as noted media critic who is widely cited and translated) through their philosophies, my aim was to test whether their works are still useful in contemporary research, or that although being influential for a very long time, their theories finally should make place for new theories and concepts concerning the archive and its digital equivalents. I think we can now conclude that although being dated, both theories can still be very useful in contemporary research.

Where most new media scholars would use the database as a research tool for data collection, or as a source for data visualization, I chose to use it as a case study for a way more philosophical analysis. By using a combination of the approaches of Foucault and Derrida, we have said more about the database's ontology and materiality than that would have been possible through other analyses. By approaching the database from this poststructuralist archival perspective, one could have found a mare's nest, but I think this analysis turned out the good way and resulted into interesting and rather new insights in database studies. My major finding is that we actually did not enter a new age in a revolutionary way as Manovich suggested – introducing a new cultural form of expression, but rather that these new archival technologies are part of a material reconfiguration in which the 'becoming digital' of the archive is the biggest (technological) change.

Coming to the end of this thesis, I want to argue once more that Manovich's conclusion about the introduction of a new cultural form is not wrong. I prefer to argue that Manovich does not ignore the materiality of the database, but rather that in my opinion he does not discuss the (digital) materiality of cultural forms enough. We came to the conclusion that, when it comes down to the materiality of the database, Manovich's work can be supplemented with Foucault's document-monument approach, and Derrida's ideas of the topological functioning of the archive. By using Foucault we concluded that the digital database is not so much a new cultural form of expression, but rather material reconfiguration of the earlier (non-digital) archive. Derrida approaches the archive as

structure or architecture, giving us new insights in the technical features of the digital database as a contemporary equivalent of the archive and stressing the importance of the archival form in the construction of memory. At last must be said that I could not have made this analysis without Manovich's concrete description of the database. Through his cultural analysis, Foucault and Derrida's abstract philosophies are given concrete interface with new media studies.

I do not suggest I made a groundbreaking analysis, I only hope to inspire more scholars to perform further research on the matter of materiality of cultural forms. This is because I believe we can still find new insight on and through older (poststructuralist) works, by using them as perspective for contemporary phenomena. I want to argue that new media studies should take into account the materiality of digital forms more often in order to say something on a level that goes beyond new media's social affects, participatory character, or technical background. By focusing on the materiality of new media phenomena, a detailed examination of their ontological changes and historical impact can be made. With this thesis I hope to have offered some new insights into the database as a cultural form, and to have made a valuable contribution to the rather young field of new media studies.

For future research I suggest to involve even more theories to supplement Manovich's thesis. For example, one could use Bruno Latour's Actor Network Theory (ANT) (Latour 2005) in which the focus is on the agency of non-humans. This could give new insights in the agency of the archive/database and might even be combined with concepts like the 'death drive' or 'archive fever'. But also works from my fellow students might come in handy, such as Bob Balm's 'A Screen Paradox' (Balm 2012) in which he discusses an unraveling of digital materialism through the material paradox of the screen. By conceptualizing the digital as part of the material world, traditional boundaries between the digital and material can be put into another light and provide us with a critical point of departure to study contemporary new media.

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