‘Having everything, possessing nothing’: Archives and archiving in the digital era

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ABSTRACT

The article explores meaning-making by investigating the subject-object relation and human-machine intra-action within the context of archive and archiving practices. It discusses changing relations between humans, machines, and objects in changing technological environments. Entering the digital archive’s cosmos, the subject-object relation transfers the focus on human-machine intra-action. The article examines the thingness of digital objects and the role of search engines in generating data collections as prerequisites for the intelligibility of the entangled parts. In digital flowness, search engines provoke a stasis in the constant movement of information, creating ephemeral collections. Thus, meaning emerges as a temporal pause within the ongoing continuum. The article argues that in the processual continuum of movement-stasis, meaning is a process – always a momentum, always stillborn, thus, intelligible to both the human and the machine. Conceiving meaning as a process within the condition of digital flowness signifies the transcendence of content in favor of processual entanglements between the human and the machine.

ARTICLE INFO:

Volume: **09**

Issue: **01**

Summer **2023**

ISSN: **2459-2943**

DOI: **10.18680/hss.2023.0008**

Pages: **133-152**

KEYWORDS:

Digital archive

Human-machine intra-action

Thingness of digital objects

Meaning-making

Search-engines

Introduction: The infinite and the collected

In his essay *On the Concept and Tragedy of Culture*, Georg Simmel uses the saying “omnia habentes, nihil possidentes”[1] to describe

[1] Simmel overturns the saying “nihil habentes, omnia possidentes,” a typical motto of the Franciscan monks. The saying aims to stress the liberation of the human from material things in favor of spiritual wealth (The Statutes 2001).

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

> the sensation of being surrounded by an infinity of cultural elements, which are not insignificant, but fundamentally not significant either, which, as a mass, have something suffocating, because man cannot assimilate in his interiority every single content, nor can he limit himself to refusing it, since it potentially belongs to the sphere of his cultural development. (Simmel 1997 [1911], 73)

Observing the world exhibitions of the early 20th century, Simmel interprets the multitude of artifacts or else cultural elements as a burden for the modern subject. The superabundance of the cultural production of modernity is such (*omnia habentes*) that it exceeds the human capability to signify the surrounding culture of his time (*nihil possidentes*). Simmel's analysis addresses fundamental issues regarding subject-object relation, the production of meaning as an outcome of this relation, and, more importantly, the potentiality of meaning due to boundlessness.

Some decades later, in 1931, unpacking his library, Walter Benjamin narrates his experience as a book collector in an autobiographical dive into the collector's mindset (Benjamin 1931). In Benjamin's retrospective reflection, the relation between the collector and his 'possessions' is the base for understanding the praxis of collecting. In his thinking, collecting is a connotation of possessing, while possessing is a connotation of remembering. "Every passion borders on the chaotic, but the collector's passion borders on the chaos of memories" (Benjamin 1931: 62). In this brief but dense description, Benjamin sets some core features of collecting, indicating subject-object relation: the sensorial excess ('passion') interconnecting with the longing for memories; the expression of that longing through material acquisitions; ordering as an outcome of the desire for borders; the urge for accumulation signifying objects as an act of becoming. In this context, collecting is a signifying process for the becoming of the modern subject, augmenting the time of his existence extending one's lifetime: the real collector lives in the objects of his collection (Benjamin 1931: 69).

Simmel and Benjamin reflect on the subject-object relation, posing it in different temporalities. Simmel's account is about synchronicity, the here-and-now of subject-object relation. At the same time, Benjamin places that relation into a broader time span, inserting 'memories' as one of its constituent elements. In the here-and-now temporality, the infinity of objects – an infinity with no borders – surrounding human beings makes meaning-making difficult, leaving the subject at a loss or unsettled in the sphere of possibility. On the other hand, a collection as an intentional accumulation of objects creates borders on the chaotic *cosmos* of memories, i.e., in the past-and-present temporality, which is always active in the present time. In that context, the collection, as the outcome of the signifying process of collecting, enables the subject to "live in [objects]" or produce meaning through a meaningfully selected set of objects. In that

sense, "ownership" as "the most intimate relationship that one can have to objects" (Benjamin 1931: 69) can be seen as an intentional act of meaning-making through selecting, curating, and ordering a set of things. Thus, in Simmel's statement, "having everything, possessing nothing," Benjamin's conception of collecting as possessing selected objects proposes a meaning-making process.

Bringing the two accounts of late modernity into a dialogue is our point of entry into reflecting on meaning-making through subject-object relation within the context of collection and collecting practices. There is a vast amount of literature on collections and collecting investigating aspects mainly related to museum studies and art history. Within this abundance of studies, I will highlight some of the epistemological issues that arise and examine them, focusing on the analog and digital archives as specific collection forms.

Collecting is mainly investigated "as a means of constructing the way in which we relate to the material world" (Pearce 1999: 4). This perception stresses subject-object relation as a formative way of creating connections between the subject and the culturally constructed world. In academic discourse, collecting includes both sensory and mental processes, as it is described as 'passion,' 'urge,' 'drive,' or 'impulse,' and simultaneously as a deliberate act of classification and categorization. Thus, 'our' relation to the 'material' world, or the world 'we' have constructed, or else cultural artifacts, is governed by the passion of "gathering or accumulating material things" (Macdonald 2006: 81). In that sense, collecting includes explorations and encounters, both in synchronicity (e.g., travels and voyages of discovery that reveal unknown and peculiar objects, 'curiosities') and in a continuous time of past-and-present (e.g., authentic objects of the past with some cultural and aesthetic value). The passion of accumulation or bringing together objects of various origins and different kinds, goes hand in hand with the passion of organization. Taxonomy, or the science of classification, is inextricably linked to collecting as a means of organization through categorization in terms of similarity, relevance, resemblance, or even difference and juxtaposition.

As an outcome of collecting, a collection is defined as a "set of objects that forms some kind of meaningful though not necessarily (yet) complete "whole" (Macdonald 2006: 82). The formation of a collection is a praxis of selection, a deliberate act of inclusion and exclusion, "indentif[ying] the significant and meaningful amidst the excess of both things and information" (Macdonald 2006: 87). The selection process goes along with the detachment of objects from their original setting and their arrangement in a non-contextual space, i.e., a museum, a gallery, a library. A collection supposes the recontextualization of objects through technologies of signification that impose the ordering and classification of objects in ways that become socially meaningful. The creation of a collection as a meaningful entity is an act of constructing self-awareness in a process that extends from discovering

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

the unfamiliar (e.g., curiosities and peculiarities) to incorporating the unfamiliar into 'our' world and establishing connections to the world and meaning through the set-up of some organizing principles by which objects were brought together.

Within this article, a collection, as an indicator of meaning-making through subject-object relation, is perceived as the intentional possession of material objects detached from their original context and grouped in meaningful sets via selection and categorization practices that define inclusions and exclusions. Within this conceptualization of collection, archive, in its material and spatial connotations, is the case study that the article investigates to examine selection, classification, and meaning-making processes in the digital condition. Ubiquitous as a conceptual construction and a dominant classification structure in both the analog and digital era, the archive is a *par excellence* area to explore processes of (re)semanticization and transformations in meaning-making.

The Order of the potential-all: Institutional archive

If the literature on collection and collecting is abundant, the literature on archive and archiving is even more so, given the fact that an 'archival impulse' is driving many disciplines, including arts. The archive concept has taken on different meanings over time (Chabin 2021) and has been studied in diverse and often contradictory ways; nevertheless, all of these interpretations can come into dialogue with each other.

Schematically speaking, historians and archivists discuss the experience –even the bodily experience– of working in the archive ["historians read for what is not there: the silences and the absences of the documents always speak to us" (Steedman 2001: 1177)] and its status as a national institution that contributes to the formation of national identity and the establishment of national narrative (Steedman 2002: vii; Berger 2013). Critical theorists place the archive "in the system of discursivity," conceiving it as "the law of what can be said" (Foucault 1972: 129) and connect it with political power ("there is no political power without control of the archive, if not memory") while emphasizing the contingent nature of the archive as it "produces as much as it records the event" (Derrida 1995: 4, 17). Even in art, throughout the 20th century, "archival art" seeks not only "to make historical information, often lost or displaced, physically present" but at the same time, also draws in informal archives or even produces them, e.g., the personal archive of an artist (Foster 2004: 4-5). In that context, terms such as "archive fever," "the archival turn," "archive as metaphor," and "archival impulse" indicate the return of the archive both in contemporary critical theory and in research and artistic practices. Furthermore, the archive's return has so powerfully exploded with the tremendous development of digital technology that "archive has become a universal metaphor for all conceivable forms of storage and memory" (Ernst 2004: 46), as I will later argue in this article.

However, the generalized invocation of "the archive" – indicating amplifying concerns on issues such as memory, truth, reality, nostalgia, and so many others related to different readings of the archive – is inconsistent with a specific interest in adhering to the strict order and the rigidity of classification of the formal archival practices. Hence, as my intention here is to examine classification as a critical feature of the collection, I will only focus my analysis on institutional archives and archivists' practices. Following archival terminology, I will examine archival order and its classification reasoning within two broad categories, materiality, and spatiality, i.e., content (archival material) and space (public institution), as 'archive' derives from their entanglement.

Regarding materiality, the archive has the aura of authenticity that derives from its quality as a non-contextual space for preserving original (and tangible) testimonies of reality. Authenticity is also an undisputable quality of a collection of objects that

> […] lies not in the properties of the object itself but in the very process of collection, which inscribes, at the moment of acquisition, the character and qualities that are associated with the object in both individual and collective memories. (Phillips and Steiner 1999: 19)

The authenticity of archival materials signifying "the *having-been-there* of things" (Barthes 1968: 147) is about their physical materiality and content. Both the physical materials and their content add authenticity as a critical element of the archive.

Regarding spatiality, the archive is a quite literal and concrete space, a repository where archival documents are kept, preserved, and restored to be accessible for research (Manoff 2004). Organizing the archive through classification systems is the key practice for achieving accessibility both to archivists and researchers. The classification process to constitute an archive is based on the principles of 'provenance' and 'original order' and not on subjects as in library collections. The principle of provenance, or the "respect des fonds," "dictates that records of different origins (provenance) be kept separate to preserve their context." At the same time, the original order means "the organization and sequence of records established by the creator of the records" (SAA Dictionary).

Taxonomy practices, including catalogues, finding aids, guides, indexes, and bibliographic records, as well as the spatial arrangement in folders, boxes, shelves, and rooms, create the archival order. This order is based on structural hierarchal trees allegedly "respecting" the original order in perceiving classification "as an organizational structure imposed upon a body of knowledge to facilitate access within a universal and frequently static framework" (Albrechtsen and Jacob 1998: 293).

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

In that context, the archive as a collection of authentic relics of the past has the "respect" for the allegedly original order of its content as a principle of its organizational reasoning. Stressing the respect to the original order as a central principle, archives "hold the promise of retaining a trace of the real" (Baron 2012: 474). This promise indicates that the archive is responsible for keeping all the relics of the past without engaging in practices of inclusion and exclusion that are crucial for collection formation.

If selection is a *sine qua non* condition for creating a collection, in archiving reasoning and practices, the selection is a process leading to the preservation, disposal, or destruction of records. It is an internal responsibility of the archival service and a stage of the appraisal process during which the archivist "determin[es] whether records and other materials have permanent (archival) value." Thus, selection as a "process of identifying which records to retain because of their enduring value" decides the acquisitions of an Archive (SAA Dictionary). In archival language, archival value has mainly legal connotations; records of value are those "that documented the responsibilities and the actions of the creator, usually a governmental official" (Boles 2005: 25). Even if critical readings of the archive stress "the law of what can be said" defining it as a technology of power that controls the limits of enunciability (Foucault 1972: 129), in archival practices selection is still conceived as the administrative task of an archivist, as just a phase of the service archiving procedure based on seemingly management judgments.[2]

In a broader perception of the collection, selection is the primary technology that creates coherent ensembles by setting boundaries to the abundance of possibilities, while categorization follows selection. In the case of the institutional archive, classification is the principal practice to constitute fonds, i.e., archival collections, while selection remains in obscurity. The acceptance of selection in forming a collection denotes the acknowledgment of the invented character of the collection. On the other hand, the constitution of the archive, according to the principle of the original order, indicates the invocation of the archive as a neutral storehouse. While a collection connotes the delimited, an archive connotes the 'potential-all.' While the collection is accepted as a selective accumulation, the archive is perceived as an ordered and classified abundance. The order of the archive is almost identical to the archive *per se*.

[2] Critical theory and postmodernism have influenced archival institutions and archivists who are now eager to recognize that their role in selection and acquisition does shape the archival record (Jimerson 2011: 373). Thus, in archival literature, the conception of the archive as just a repository and of the archivist as just a "neutral custodian" has been challenged by studies that connect archival appraisal to selection, even discrimination, refusing the "status of archive" to documents appraised as "unarchivable" (Mbembe 2002: 20; Ketelaar 2001). Moreover, archivists and theorists reflect on the implications of archival classificatory methods and systems that "determine how meaning is imbued" in classificatory practices (Yakel 2003: 3). However, this criticism has influenced neither the dominant archival discourse nor appraisal processes.

The archive of everything: Digital archive

In conjunction with the institutional archive, an alternative vision has persistently sought to create a space capable of encompassing the entirety of world knowledge. By excluding Antiquity from our purview, we can discern three distinct historical moments extending from modernity to the present day, where visions to create an archive of everything were intensifying. The initial moment occurred in the Age of the Enlightenment, characterized by the passion for knowledge and the desire to preserve it, epitomized by Diderot's and D'Alembert's Encyclopedia; the second moment emerged in the first half of the 20th century, envisioning repositories of universal knowledge to foster world peace. The third moment was launched with the digital era, where the post-war vision has become a ubiquitous environment we all inhabit. Furthermore, while the institutional archive is typically intended for the few, the envisioned all-encompassing archive is designed for the many. In addition to accumulation and preservation, the envisioned archive of everything aims to disseminate its contents to the public.

The technologies envisioned for this objective were differentiated according to the respective periods. The Enlightenment's Encyclopedia was a collection of entries organized in alphabetical order, displayed on the surface of a book page without a hierarchical system. Following the Enlightenment's urge for classification, coherence, and order, the Encyclopedia was criticized for lacking the coherence promised (Broberg 1990: 48). In the famous *Preliminary Discourse to the Encyclopedia of Diderot*, D' Alembert responded to that criticism:

> It is impossible to improve the arbitrariness of this great original profusion. The universe presents us only with individual things, infinite in number and with almost no fixed and determined division [among them]; none of them can be called the first or the last; everything is connected to everything else by insensible gradations.

Additionally, in his *Oeuvres completes*, in the article "Encyclopédie," D' Alembert compares "encyclopedic order with a machine, the parts of which fit together, but which can also be assembled in a completely new way" (Broberg 1990: 49). D'Alembert's conceptual model, which portrayed an infinite number of objects capable of being arranged in various configurations, engages in a dialogue with the digital archive of everything, as elaborated below.

In the first half of the 20th century, the second moment attempts to create an all-encompassing archive previewing some of the features of future computing technologies. Therefore, they can be seen as precursors to digitality. To create an all-encompassing archive, Paul Otlet and Henri La Fontaine founded Mundaneum, an

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

institution established in Belgium in 1910, aiming "at gathering, indexing and sharing the universal knowledge" (Mundaneum website).[3] The founders of the Mundaneum collected this vast "knowledge" in the form of 12 million inand dex cards, which were then categorized and preserved as an archive. They developed a classification system called the Universal Decimal Classification, which enabled the organization of diverse media types, including documents, books, audiovisual media, and even museum objects. In 1914, Otlet described the envisioned archive of everything in the following manner:

> These collections are conceived as parts of one universal body of documentation, as an encyclopaedic survey of human knowledge, as an enormous intellectual warehouse of books, documents, catalogues, and scientific objects. Established according to standardized methods, they are formed by assembling cooperatively everything that the participating associations may gather or classify. (Union of International Associations 1914: 116, from Rayward 1994: 240)

Described as "an important chapter in the history of hypertext and information science" (Rayward 1994: 235), the Mundaneum can be seen as a hybrid of an Enlightenment-era encyclopedia and a classification system that would later evolve into computer-based classification systems.

In 1945, many years after the Mundaneum's existence, Vannevar Bush conceptualized the MEMEX, a computational device that would enable an individual to "store *all* his books, records, and communications, and which is mechanized so that it may be consulted with exceeding speed and flexibility" (Bush, 1945, emphasis mine). Bush's detailed description of the device reveals his vision: a memory and indexing apparatus that will function as an extension of human biological memory and, at the same time, as an index of stored data.[4] What Bush described is a computational 'archive-of-everything' that meets the needs of managing a vast amount of information by searching mechanisms and combining all the related information.

Finally, the vision to establish a space capable of encompassing the entire world knowledge – the 'having everything' that disturbed Simmel in the early 20th century – was materialized in the digital condition. From the simplest digital apparatus – the personal computer – to the most complex system of interconnected computer networks

[3] As Otlet dreamed that someday people would access the archive from their homes, Mundaneum is considered a forerunner of the Internet. Today, Mundaneum is an exhibition space in Mons, Belgium, organizing exhibitions and displaying items from the vast archival collection formed by its founders.

[4] Bush did not mention the origin of the name MEMEX. It could be MEMory + indEX or MEMory+Extender.

– the Internet – digital space functions as an archive of everything: a repository of all existing information, an environment to store, preserve, process, search, and retrieve the desired information. Thus, I use the term 'digital archive' not to refer to specific personal, museums, archives, or libraries' digital spaces made for managing and displaying particular collections. All of these can be seen as parts of a unified system, a network of networks, i.e., the Internet, because the Internet was the technological development that made possible such endeavors. The Internet permitted the creation of a "software universe" consisting of all the various software such as platforms, search engines, etc., mediating "people's interactions with media and other people" (Manovich 2013: 7, 29).

The digital archive reveals the "importance of the analog to conceptualizing the digital," exposing how "the digital emerged as a clean, precise logic through an analogy to an analogy" (Chun 2011: 10). In terms of materiality, digital archive materializes the long-standing vision of the analog realm to create a space capable of encompassing the entirety of world knowledge. That vision, as the Mundaneum and Memex cases have shown, was the intended prerequisite for the conceptualization of an almighty machine that could augment analog capabilities in terms of both materiality (the management of 'Big Data' as the notion of 'world knowledge' could be translated) and spatiality (the digital sphere as an infinite storehouse).

In this conceptualization, the consideration of selection, encompassing dilemmas of inclusion and exclusion, is categorically dismissed. In the analog realm, selection as technology-defining inclusions and exclusions is a prerequisite of collection formation, while in the case of archives, selection, despite the critical theory's criticism, was supposed to be a necessity imposed by space limitations. The rapid development of information technology in terms of hardware and software overcame the selection dilemma. Computing was conceptualized as a means to surpass selection, conceived as a 'limitation.' Thus, exceeding both the practical limitations of space and memory that made selection a necessity and the conceptual aspect of selection, which is a 'fault' from the point of view of technology, the digital archive was both *conceived* and *developed* to "have everything."

In addition to the issue of materiality, i.e., the content of the digital archive, digital computing is conceived as an archive in terms of classification and categorization. Leaving aside hardware and software classification and focusing solely on data classification, computing involves grouping and organizing data into meaningful categories to facilitate data retrieval and management. Additionally, computer classification involves using hierarchical structures to organize and describe data, which follow archive classification and terminology: collection, including folders, folders including files, and files including items. This emergence of digital computing as an analogy to the analog archive is also revealed in the vocabulary of software engineering. Archive File, Source Code Archive, Version Control Archive, Archive

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ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

and Restore, Software Archive Repository, Codebase Archive, Data Archive, Archive Format, Archive Management, Archive Compression: these terms stay as a reminder of the intellectual origin of computing as well as its intention to be an omnipotent technology of storing, managing, and preserving all of the world knowledge.

The appropriation of the archive by digital computing reasoning has challenged traditional notions of archives and archiving. The digital archive has been studied from many perspectives. Archival studies explore the transformation of analog archives through digitization (Manoff 2004), seeking ways to "address the digital challenge" (Thibodeau 2022). Media archaeology views the digital archive as a technological apparatus that leads to epistemological changes (Ernst 2013), while a semiotic perspective explores the production of meaning in various manifestations of the archive (Dondero et al. 2021). In this article, I use the term 'digital archive' to encompass both digital computing as a data processing technology and the Internet as a space for communication among networks and devices where computation outcomes are displayed. Combining digital computing and the Internet in the "digital archive" concept may seem excessive. Can an all-inclusive term be helpful as an analytical tool? I argue that the entanglement of computing machinery and the Internet, where the human-machine relation is performed, is so strong that it would be fallacious to differentiate between them. Thus, the digital archive is perceived as a system of both programming and networks where human-machine relations are performed by mediating computing processes (Pentazou 2021). This systemic perception of the digital archive helps us recognize the radical transformations of subject-object relation and, consequently, meaning-making in the digital condition.

In the analog world, forming a collection or an archive was the outcome of a subject-object relation, as I have argued thus far. However, in the digital condition, the human-machine relation is performed while intra-acting within the digital archive of everything that matters. This statement needs further clarification.

In computing terminology, 'interaction' is the dominant term to denote the human-machine relation, focusing on transforming the digital environment by the human but not vice versa, thus presupposing relations between autonomous and pre-established entities. The field of Human-Computer Interaction (HCI) indicates this one-way relationship by focusing on the relations between 'users' and 'computers' and defined as "a discipline that is concerned with the design, evaluation, and implementation of interactive computing systems for human use" (Hewett et al. 1992: 5). Conversely, perceiving the human-machine relation as an 'intra-action' emphasizes the impossibility of an absolute separation between human and machine. Intra-action, defined by Karen Barad as the "mutual constitution of entangled agencies" (Barad 2007: 33), signifies the materialization of the entities as autonomous agents through the performances established between them.

While intra-acting within the digital archive, the human and the machine are in constant entanglements. These entanglements presuppose that the human "becomes differentially intelligible to" the machine, and the machine "becomes differentially intelligible to" the human (Barad 2007: 379). Asserting that the human is interested in the archive's content whereas the machine is indifferent to the content and focuses solely on data processing (Ernst 2013: 84-86), intelligibility depends on human-machine intra-actions. To explore meaning-making through human-machine intra-actions, our investigation will focus on the prerequisites for the emergence of intelligibility: the becoming of digital objects as things and the role of search engines in generating collections.

The thingness of digital objects: Database records

In the digital space, the archive comprises a continuous flow of digitally produced or digitized data. As the purpose of the article is to investigate the reconceptualization of collection in the digital condition, the digitized objects and their resemantization through the digitalization process will be the focus of the investigation in this section.

Different kinds of material were preserved in distinct collecting institutions in the analog realm: archives collected mainly documents, libraries books, museums, and gallery objects. In the digital realm, all kinds of material, texts, images, sounds, and videos of different origins and eras constitute the pulsating content of a unified collecting space that is both structured and perceived as an archive (Ernst 2013). Computing technology manages these different materialities in an undifferentiated way: for it, they are numerical symbols – bits – which it has been trained to *translate* into image, text, sound, and video. The digitalization process of converting documents, books, and art objects into digital form can be seen as a translation between analog and digital languages where the analog is converted into the digital, and then the digital is reconverted into the analog to be accessible to the human senses.

Through the digitalization process, the distinctions between physical materialities are blurred (Manoff 2004). Documents, books, paintings, everyday objects, sounds, and videos are first digitized – converted into a suitable digital format (txt, jpeg, mp3, mp4) – losing the original characteristics of their physical materiality. Relocating an object from an archive's box, a library's shelf, or a museum's display case to the digital sphere, it transforms into a digital format, a fragment. It is no longer an object since it is deprived of all its characteristics and does not serve its intended function anymore (Heidegger 1971 [1950]). To become a digital object, that fragment must re-acquire the characteristics that connected it with the original object and must be re-positioned in the digital space so that it can be stored, preserved, and accessed. While digitization is a concrete stage of converting analog objects into digital formats, we should understand

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

digitalization as the technology's "capacity to process data" by developing adequate information systems. The development of the relational database in the 1980s, based on the appropriation of the mathematical relational calculus, is the *par excellence* data processing mechanism of the algorithmic realm (Hui 2016: 25, 137). As the outcome of the digitization process, a digital fragment is inserted into the relational database structure, becoming a 'field' in a database record.

From that time on, a new and autonomous entity is created: the database record named by an invented 'title' that correlates the two materialities – the analog and the digital – consisting of 'segments,' or else 'fields'/'attributes'/'metadata,' defined for it (Celko 2013). The database record as the 'smallest entity of a data set' is for the machine a collection of segmented information about a specific category, e.g., 'books,' 'fonds,' 'art objects,' etc., within which an analog object is classified.

Hence, the creation of a digital object involves a programming process consisting of distinct stages:

- the digitalization of the analog object – where the object becomes a digital format, a fragment,
- the selection of the appropriate database for the analog object – where the object is classified in a 'category,'
- the insertion of the digital format into a database record – where a new object is born still naked from all its previous features,
- the filling of record fields – where the new object (a) contains all the attributes of the digital matter – time, place, size, material, producer, etc. – as descriptive metadata, and (b) becomes accessible through keywords ('labels' or 'tags' – a form of descriptive metadata).

After this procedure, the new object assumes the form of a database record entered in a taxonomy, consisting of descriptive metadata, and thus becomes a comprehensive digital entity. Because of this process, the digital object as a database record is no longer the 'object' it used to be; it can no longer serve its intended function. Reflecting on the correlation between objects and their conversion into database records opens the discussion about object and thing and, therefore, about the thing theory formulated by Bill Brown. As Brown argues,

> We begin to confront the thingness of objects when they stop working for us […]. The story of objects asserting themselves as things, then, is the story of a changed relation to the human subject and thus the story of how the thing really names less an object than a particular subject-object relation. (Brown 2001: 4)

Conceiving an object inserted in a database record as a 'thing' denotes the deprivation of the object of its uses, context, owner, and associations. As a database record, the thing that stands for an object acquires "attributes" as additional layers of information. In relational databases, we define attributes (or attribute fields, or simply fields) as the characteristics that collectively describe an entity's properties (Rigdon 2016: 106). These descriptive properties are "identifiers that uniquely identify the object" (Zhang 2009). While attributes identify the properties of an entity, metadata, defined as "information about the properties or structure of data," operates as informative labels of the entity (Rigdon 2016: 769). With metadata, a digital object acquires two levels of signification. On the first level of signification, metadata uniquely identifies the digital object. On the second level, metadata creates mental connections between different digital objects.

To understand the particularity of the thingness of a digital object, it is helpful to compare it with the thingness of a collection object. Relocating into a meaningful set of objects as part of a collection, the intended function of an object changes. In its new status as a thing, its significance is derived from its position in the specific and *only* set of things indicating the relation between the collection and the collector (either person or institution). As a thing of a collection, its meaning is derived from the correlation between human-object in terms of "circulations, sequences, transfers, translation, displacements, crystallization" (Latour 2000: 10). Thus, the thingness of a collection object is limited within the boundaries of the collection.

On the other hand, the thingness of an object inserted into a relational database also indicates a changing relation between the human – the human-facing-the-screen – and the digital object. But this time, the relation is not restricted within the boundaries of a collection. The digital object, composed of data and metadata that describe the object as prosthetic layers of signification, can be inserted into multiple sets of objects due to the relational calculus, i.e., the language that translates metadata into relations between digital objects. In the digital archive of everything, "machines understand the semantic meaning of objects via the structures given to the metadata" (Hui 2016: 52). Thus, metadata make digital objects meaningful to both machines and humans, while relational calculus processing metadata opens up endless possibilities for connections permitting the insertion of a digital object into multiple webs of relations (Hui 2016: 141-2). Thus, the thingness of a digital object lies on its ability to be hinged not on a unique data set (i.e., a collection) but on endless possible webs of relations (from the machine's viewpoint) or webs of meaning (from the human's viewpoint). These webs of relations/meaning are generated as results delivered by the search mechanism, which initiates the process of information retrieval.

Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

Ephemeral collections: Search mechanism

Typing a few words into a search box is our point of entry into the digital archive of everything, taking for granted the availability of a search bar, mediating our finding needs. Developments in Search Engine Optimization (SEO) were extraordinarily rapid and revolutionary in their intellectual outcomes.

A few decades ago, when confronted with empty search boxes, the human-facing-the-screen had to complete words or phrases trying to guess the keywords others had inserted into the database records as metadata. Since 2009, intelligent search algorithms have mediated our search (Mahnke and Uprichard 2014: 260). When we type a word, the machine suggests specific phrase extensions based on search history, i.e., what the user or other people have already searched. The autocomplete function that "enables users to quickly find and select from a pre-populated list of values as they type, leveraging searching and filtering" (jQuery UI) is now a standard tool in existing applications. The autocomplete mechanism is a technology of prediction based on people's search behaviors, a mechanism of foreseeing "what users want to know before they actually formulate their queries" (König and Rasch 2013: 11). It directs search behavior, transforming the unlimited universe of possibilities into a "limited number of possibilities" (Bankov 2017).

In the algorithmic search, re-search becomes both a practice and a tool. But it is something more than that: it determines the regime of visibility. Without search engines, information stays invisible in the deep levels of a database. Visibility is based on two conditions: the insertion of metadata into the raw data already discussed and the search mechanism based on metadata. In the digital archive, visibility remains in flux. The search mechanism determines the potentiality of digital objects to be inserted into various webs of relations/meaning according to the query that brings the invisible into the status of visibility. Different queries lead to the emergence of different constellations of objects, increasing their connectability and thus expanding their potential to hinge on multiple networks (Massumi 2002: 94).

In machine language, a 'query' is a request for information, the equivalent of a human 'question.' But while a 'question' in the search box invites propositions, a query performs specific tasks by initiating a programming procedure. The differential intelligibility between the entangled parts permits the performance of a process whereby the human asks a question, and the machine translates it into a query that accomplishes the task of finding data, responding to the initial question by returning a sequence of structured information models as derived from a complex algorithmic data machine process.

This process, which remains invisible to us, makes the 'results' of the query visible on the screen as a list of fragments. It is the list, as a display mode of data generated by the search engine, that is visible and accessible on the screen

(Manovich 2013: 209). As the dominant mode of displaying results, the list is a vital visual element of the digital archive, indicating a non-hierarchical assemblage, non-linked but still related information.

Within the digital archive, human-machine intra-action, mediated by the search engine, provokes a stasis in the constant movement of information. The search engine suspends the flow by gathering sets of data related by metadata relevant to the question/query that has generated them. In that sense, it is the search engine that forms collections, bringing together data of various forms, origins, and kinds selected in terms of *relative* pertinence. As the outcome of human-machine entanglement, these collections are meaningful both to the human and the machine. The human's intention and the machine's algorithmic reasoning select the relevant data set to generate meaningful collections concerning the question/query posed. In every such intra-action, collections provoke temporal pauses in information flow. The generation of a collection is followed up by the generation of another one in the continuous human-machine entanglement. These are ephemeral collections in a sequel of movement-stasis performance (Massumi 2016). They are ephemeral in many ways.

In the digital archive, information flow assures that everything is always on disposition while in a state of invisibility beneath the screen surface. The condition of flowness does not characterize only the state of information; it also characterizes human-machine intra-action as performed by an unstoppable sequel of questions/queries followed by other questions/queries. Thus, ephemeral collections can be perceived as the outcome of a processual unity between movement (information flow) and stasis (question/query). Intra-acting within the digital archive, meaning derives as a stasis in the processual continuum triggered by the search engine. But stasis is just momentum, meaning is generated as a temporal pause in the continuum. The collections resulting from the processual unity of movement-stasis are always ephemeral, both in terms of temporality – a stillborn momentum followed by another stillborn momentum – and in terms of potentiality – possible gatherings of relevant digital objects capable of connecting into different webs of relations/meaning in the subsequent stasis in the continuum.

Thus, in the condition of digital flowness, ephemeral collections mark the momentum of their generation as a temporal sign in the digital space. But this momentum leads to a new movement: the question/query process is open to new possibilities. If in the digital archive of everything, 'everything' denotes possibilities, ephemeral collections break up on the screen as lists of emergent possibilities. Ephemeral collections, as possible webs of relations, signify the potentiality of meaning: the emergence of meaning as a possibility, constantly in flux (Massumi 2016: 137). More importantly, ephemeral collections also signify the potentialization of meaning, i.e., the emergence of meaning as a process depending on the differential intelligibility of the entangled human and machine.

Punctum. International Journal of Semiotics | **09:01:2023**
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

Thus, in the processual continuum of movement-stasis, the differential intelligibility of the entangled parts, generated ephemeral collections, reveals meaning as a process – always a flow, always stillborn, thus, intelligible to both the human and the machine. Conceiving meaning as a process within the condition of digital flowness signifies the transcendence of content. What matters are not objects, collections, data, or data sets; what matters is the processual search for the data. Meaning-making does not derive from the ephemeral collections displayed by the search engine. Meaning-making is the process of intra-acting, while meaning is a processual continuum, always elusive in terms of content.

However, this elusiveness of content, or meaning as a possibility, does not leave humans (or, better, the entangled human-machine) at a loss. Because they are entangled in the continuum of movement-stasis, and it is this continuum that matters. In the digital archive of everything, possession as the temporal grasp of meaning is not what matters. What matters is intra-acting within the processual continuum. In the digital condition, the saying "having everything, possessing nothing" signifies a state where everything is on disposition and, thus, possession is indifferent, content is indifferent, and temporality is indifferent: meaning lies in the process of intra-acting. Through intra-action, the archive of everything inflates, becoming an almighty structure for the boundlessness. But this boundlessness is no longer a chaotic cosmos: subject-object relation no longer signifies meaning-making. The 'subject-object relation' passes the baton to 'human-machine intra-action,' signifying the omnipotence of the movement-stasis processual continuum. Within this continuum, the intelligibility between humans and machines is strengthening. Meaning is the process in the continuum movement-stasis that signifies the increasing intelligibility of the entangled agents.

Concluding remarks: On the eve of a new era

The article has aimed to explore meaning-making by delving into subject-object relation and human-machine intra-action in the realm of collection and collecting. Ubiquitous as a conceptual framework and a prevailing organizational structure in both the analog and the digital sphere, the archive stands out as a *par excellence* domain for investigating evolving dynamics among humans, objects, and machines within shifting technological landscapes.

Simmel's and Benjamin's reflections on the infinite and the finite, or else the abundant and the collected, reveal collection as a deliberate act of possessing selected materialities to tame the superabundance of surrounding objects. While a collection echoes boundaries, the archive, as a form of collecting authentic past materials, resonates with boundless potential. Collection, nodding to the finite, embraces selective objects, while the archive, nodding to order, unfolds as a mosaic of classified abundance.

The archive, as the order of the potential-all, aligns with the vision of creating a space capable of encompassing the entirety of world knowledge. The digital space is built upon this vision: to function as an archive-of-everything – a space designed for the storage, preservation, processing, search, and retrieval of desired information.

Within this archive-of-everything, the distinctions between physical materialities – documents, books, paintings, everyday objects, sounds, videos – are blurred. Physical objects are converted into digital entities through digitization processes and upon insertion into a database structure. As a database record, the new digital materiality is augmented, compared to its analog counterpart, by adding metadata. While the analog object is confined within a collection, metadata, as prosthetic layers of signification, allows the digital object to be included in multiple collections. In the digital archive of everything, a digital object, in the form of a database record, becomes intelligible to both humans and machines.

Intelligibility between the entangled agents – human and machine – is also manifested in the search engines that process data to determine the visibility of digital objects, creating endless possible collections of results in response to different queries/questions. These collections are always ephemeral since they are generated as temporal and potential moments in the condition of digital flowness. In the digital archive of everything, ephemeral collections signify the potentialization of meaning determined by the continuous human-machine entanglement.

Thus, in the digital condition, meaning-making is no longer derived from contextualizing digital objects in collections but from the constant entanglement between humans and machines. This entanglement has the differential intelligibility between the two agents as a prerequisite.

The article has discussed the conversion of analog materialities into database records to be intelligible to search engines. Moreover, it has revealed a seemingly contradictory side effect: the transcendence of content in favor of human-machine intra-action. These insights underline the importance of the intelligibility between humans and machines in meaning-making. On the eve of a new era, the rapid advancement of artificial intelligence demonstrates the significance of the increasing intelligibility of the entangled human-machine agency.

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Punctum. International Journal of Semiotics | **09:**01:2023
ISSN 2459-2943 | DOI: 10.18680/hss.2023.0008 | **punctum.gr**

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