Social media and the slow death throes of diachrony

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Abstract:

Over the course of the twentieth century (and now into the twenty first), numerous iterations of new media have been accused of compressing time to the point at which we experience nothing but a perpetual present. In practice, however, these claims always seem somewhat overblown: even in an age of 24-hour news, ubiquitous mobile communication, and high-speed broadband, time has not been obliterated in the manner portended by pessimists. What I wish to argue in this paper is that all media involving the storage of information, from early modes of writing onward, necessarily engender a negotiated tension between synchrony and diachrony. More specifically, I will examine social media as a paradigmatic example of that which Wolfgang Ernst describes as the displacement of the spatialized archive by its temporalized equivalent. Platforms such as Facebook, Twitter, Instagram, etc. are premised upon the storage of seemingly diachronic data for (what seems like) perpetuity, and yet, at the same time, the dynamic, generative, and procedural operability of this archived data undermines its historical temporality (that is, its deferral) in favour of an apparently instantaneous presence formed in the feedback loop between the user and the mnemotechnical effects of these social media. Faced with such social media as forms of synchronic archival on the one hand, and their ephemeral competitors on the other, which deliberately forego archival in the name of privacy, we see in effect two divergent modes of synchronous temporality: in the former case, practices of archival result in a compression of past, present, and future into a single, continuous present; in the latter, the disavowal of archival (at least in theory), results in a very different form of communicative immediacy, more reminiscent of pre-literate orality (without directly replicating such circumstances). Such distinctions, I argue, must be kept in mind when studying the temporal effects of social media.

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Archival, in the conventional sense of the term, is a process that distinguishes the past from the present. Bernard Stiegler (2009b: 44) claims that "the transition from proto-history to history is the passage from memory-aid to writing," observing that the possibility of genuinely historical thought is conditioned by the differentiation between a living present and an objectified past, on the basis of an inscription that is more than mere mnemotechnic, but within which the past is in some limited sense accurately (i.e. orthographically) recorded. It is the medium of phonetic writing, then, that would appear to provide the first effective technical support for historical thought, precisely because it is only in the iterability of such a medium – that is, in Jacques Derrida's (1982: 328) terms, the ability to "detach itself from the present and singular intention of its production" – that the past can be recovered by those who did not actually experience its constitutive events themselves. The written archive is, therefore, the originary technic of diachrony (change over time), establishing an historical mode of temporality distinct from the experiential flux of the present. This can be seen even in an object as banal as the diary (a form of archival, which, at least in its traditional written form, is being - or perhaps already has been - rapidly displaced): one sees in the diary a visual representation of one's past, crystallized within one's indelible handwriting; but this is also a past that is accessible to others, however limited such access may be. The archive does not merely *remind* one of events that one has already experienced, for it *records* those events in some meagre fashion.

At the same time though, notes media theorist Wolfgang Ernst (2004: 47–48), such an archive is not in itself temporal, because "what remains from the past in archives is the physical trace of symbolically coded matter, which in its materiality is simply present in space". The paradox of the written archive, in other words, is that as much as it might enable our historical understanding of time, it itself is in fact spatial in nature (or perhaps more precisely, it is in its spatiality that such time is preserved). Whether we are speaking of a personal diary or a vast library, what we encounter are the recordings of numerous events distributed graphically - in "the horizontality of spacing", as Derrida (1997: 69) refers to it - be they in the various pages and entries of the diary, or the manifold books, manuscripts, and journals arranged categorically in the library. We project time upon this archive, for "archival space is based on hardware, not a metaphorical body of memories," and as such, "upon its stored data narratives (history, ideology and other kinds of discursive software) are being ap-

plied only from outside" (Ernst, 2004: 47). The archive does not store time, in other words; we read time into it, albeit a time always already structured by the spacing of this archive.

The odd thing about this relationship is that, in effect, synchrony produces diachrony. Whereas in our everyday lives we experience the world as a continual and indivisible flux of presents - presents which, in their presence, have already passed into the past, and are only apprehensible as such - what we find in the written archive by contrast is a past that grasps us in its unshakeable presence. The archive is in its necessary organization negentropic, reducing "the disorder of processes into coded, grammatological structures" (Ernst, 2004: 49). The spatial archive allows us to see the past spread out in front of us, and in doing so, enables not only the division of the past from the present - in the sense of not just being a present that has passed, but something *wholly past* - but also the slicing up of the past into discrete moments.

The rise of the internet, argues Ernst (2004: 48) however, and digital, networked media more broadly, is engendering a quite dramatic shift in the nature of the conventional archive, for in the computerized, digitized medium, "the spatial metaphor of the archive transforms into a temporal dimension; the dynamization of the archive involves time-based procedures". What we are seeing, in other words, is the transition from a mode of historical time premised upon the spatial nature of the written archive, to one instead premised upon the temporal nature of the digital archive. It is through the social media of our present day (e.g. Facebook, Twitter, Instagram, etc.) that I wish to attempt to illustrate this shift in this paper, for it is in these new forms of mass media that I believe the disjuncture between synchrony and diachrony as manifested in the archive is most visible.

Temporalizing the archive

"Nowadays," argues Ernst (2004: 49–50), "the static residential archive as permanent storage is being replaced by dynamic temporal storage", the time-based archive being "a topological place of permanent data transfer". Where the written archive produces diachrony in the inherent separation between the objectified past of its data and the living present within which that data is retrieved, this new, temporal archive - the direct product of digital computing and networked media - operates on the basis of "immediate data feedback" (Ernst, 2013a: 98), eliminating the distinction between archival and retrieval as discrete practices.

The cybernetic feedback loop - that is, in Norbert Wiener's (1954: 26) words, the attempt to "control entropy through feedback", whereby an organism or machine is able to alter its future behaviour

based upon information that it receives from its prior actions - it should be noted, has always been implicated in the very notion of the archive: history is recorded, and always has been recorded, at least in part as a way of ensuring the accurate transmission of information across generations; in other words, in order to allow those still to come to learn from the errors of the past. We can think, for instance, of the Hebrew Scriptures (i.e. the Old Testament), which record, over dozens of books with nearly as many authors, not only the purported history of a nation over a vast period of time - transcribed, in large part, from oral tradition and testimony - but also the moral and spiritual lessons to be taken from this history.

Stiegler (2009a: 46–47) notes that "the power of belonging to a group requires the projection of an always fictive unity of this group," and it is through this fiction that a specific and contingent mode of collective temporality is established and maintained: both a past, through which this collectivity coheres, and a future - specifically a deferred, impossible future; a messianic time that will not and cannot come to presence except in its own perpetual postponement - that shapes the desire of this community. The nation and its written history form a continuous feedback loop - remembering, of course, that the Hebrew Scriptures were only solidified around the third century BCE. As Robert K Logan (1986: 94) remarks, instead of just annalistically recording events in isolation, "the Hebrews connected the events and imbued them with purpose," as well as having "a measure of objectivity, recording both the events of which they were proud and those of which they were ashamed". It was a question of pedagogy and collectivity as much as vanity.

The memory that forms the digital, temporal archive, however, in distinct contrast to this prior example, is not "clearly separated from present operations" as in the traditional, spatial archive; rather, it "becomes cybernetically a feedback ingredient of present operations itself, its basic condition" (Ernst, 2013a: 101). What this means is that the feedback loop does not rely upon any kind of narrativization of its data in order to alter future behaviour, for it is the behaviour - and even the structure - of the archive itself that is altered. As the spatial architecture of the written archive is transformed into "sequentializing, time-critical, synchronous communication" (Ernst, 2004: 50), it gradually becomes more and more generative, procedural, and dynamic, such that changes in the data that it stores engender immediate changes in both its output and the rules that produce this output. No longer is there any direct or necessary requisite for human administration of this archive and its contents - even this distinction itself becomes redundant when speaking of an archive in which its content determines, at least to some degree, the structure of its output.

Time-criticality in the socially mediatized archive

When examining social media, it is easy to be sidetracked by what we might refer to as the "human" side of the equation - that is, firstly, the way in which we use these media both as tools of intersubjective communication and means for the definition and narrativization of our projected self-identity, and secondly, the various administrative processes through which such platforms are developed and controlled. The notion of the temporal archive that I have been developing thus far should in no way imply an autonomy from human culture or discourse, for on the contrary, social media platforms are deeply embedded within what Gilbert Simondon (1980: 60–61) refers to as the *associated milieu*: "the environment which the technical being creates around itself, an environment which it influences and by which it is influenced", and which acts as "the mediator of the relationship between manufactured technical elements and natural elements within which the technical being functions". Social media, as the name implies, is inherently reliant upon these "social" components as not only the conditions of possibility for its very existence, but also as the facilitators for its continued operation.

The point that I am making here is rather that the operation of these social media *as* modes of archival does not in itself have any relation to such culture or discourse, even though its operation is reliant upon the data supplied by these institutions (if we may call them that). The digital, temporal archive has no narrative, and no need for one - it does not need to make sense of data, for it simply processes it. What I am focusing on for the moment, therefore, is what Ernst (2013b: 134) refers to as "media's intrinsic perspective and specific inner temporality", separate from any specifically human concerns.

Platforms such as Facebook or Twitter form quite precise feedback loops, using the data that is voluntarily provided to them through users' status updates, tweets, "likes", retweets, and so on, as well as that which is gained through various modes of tracking and surveillance, including of one's web usage and even one's physical location, in order to then present specific results back to users. The fascinating thing about this is that, whilst in purely cybernetic terms such mechanisms are still quite rigid (in other words, I would not want to imply that there is any kind of artificial intelligence at work here; rather, I merely wish to indicate the dynamic, generative nature of such platforms), these archives (for that is what they are, in effect) have been developed with a remarkable ability to learn from the data that is provided to them. Most emblematic of this is surely Facebook's capacity for recognizing the faces of one's friends in photographs uploaded to the site, without any user intervention. This goes beyond the relatively simple mechanisms of targeted advertising, which have

been operating for many years now, toward a quite sophisticated processing and recognition of calculable patterns within images that once were confined to the domain of human perception.

"Aren't they talking about producing a 'vision machine' in the near future," asks the always prescient Paul Virilio (1994: 59) prior even to the advent of the world wide web, "a machine that would be capable not only of recognising the contours of shapes, but also of completely interpreting the visual field, of staging a complex environment close-up or at a distance?" From such a machine, he goes on to suggest, an apparatus of "visionics" could be developed whereby "the computer would be responsible for the machine's - rather than the televiewer's - capacity to analyse the ambient environment and automatically interpret the meaning of events". The developers of the facial recognition algorithms constantly deployed by Facebook in its everyday operation have, to a considerable extent, achieved this, with one key difference: as a temporal archival mechanism, Facebook does not need to *interpret meaning*, for although meaning is a quality that end-users may attach to its operations, at a programmatic level, the recognition of faces is a mere question of calculability utterly detached from all semantics.

This recognition automates one of the most crucial elements of the social media archive: the creation of metadata through which the information produced and collected by the archive is sorted and processed. "The pure 'bottom up' data that the digital networks produce en masse," argues Stiegler (2012: 14), "is unexploitable", and as such, it is through "the collaborative production of metadata" that such information is restored to its place within a top-down hierarchy of power. Social media - Facebook in particular - represent probably the most extensive apparatus of metadata production in history, far greater than any government census could possibly manage. Each individual is tagged and sorted according to a myriad of criteria, totally hidden from view, within an archive that does not rely upon a spatial mode of organization, but rather, upon an immediate feedback loop between itself and its users. Social media, as with our networked society more generally, operates upon "an economy of circulation: permanent transformations and updating" (Ernst, 2013a: 99).

Whereas, as already discussed, the synchrony of the spatial archive produces diachrony, in the case of the temporalized, cybernetic archive, the opposite would seem to be true: the dynamic nature of the archive, with no apparent separation between the process of archival and that of data retrieval, undermines the historical temporality engendered by the aforementioned written archive, for the data that is archived no longer appears as an objectified past, but on the contrary, as a dynamic present. Writes Stiegler (2012: 15):

the entire organology of the contemporary social web is constructed to smooth out the diachronies and singularities of psychic individuals in order to aggregate them through relational technologies with the aim of unilaterally controlling the fruits of the collaborative production of metadata.

This feedback loop is not just a result of the architecture of the social media platform itself, however, but is also amplified by the immediacy of it as a tool for communication. Where written media, by whatever means they are carried or disseminated, are necessarily deferred, in the sense that there is always a perceptible gap between transmission and reception, what social media provide is an environment in which one's actions are not only highly visible (to one's friends, or the broader public, depending on the privacy settings chosen) but are subject to the possibility of immediate response. Outside of actual face-to-face interaction, there is no other space in which the feedback loop between behaviour and external reactions to such behaviour is so closely bound, the difference being of course that in the case of social media, there is a much larger pool of potential interlocutors and critics.

Although it is still a written medium (at least from the perspective of its human users), unlike previous manifestations - from the wax and clay tablets that Plato critiques in the *Phædrus*, through to the printed books that we still rely upon today - the generative operability of social media - which, it is important to note, still relies upon a textual medium derived from such writing - *speaks back to its users*. The diachronic relationship between the past and present is dissolved, or at the very least weakened, as the deferral traditionally necessitated in the gap between writing and reading is collapsed.

The colonization of the everyday

It is common to think of media as instruments or processes of exteriorization - extensions of the body or the mind - as exemplified by Marshall McLuhan's (1964) conception of the medium as prosthesis. Stiegler (1998: 169) speaks of exteriorization as "the emergence of a new organization of memory, as the appearance of new memory supports", beginning with writing, through which one's experience temporality as historical develops. Social media, at least superficially, represent quite clearly the way in which digital media are able to colonize our lifeworld through such exteriorization: as more and more of our everyday experiences are captured and recorded through these

platforms, we find ourselves relying increasingly heavily on them as a means of memory support - and concomitant to this, as means of narrativizing, and thus attaching meaning to, our own lives.

At the same time though, social media platforms also represent a deep internalization of their specific modes of communication, for the precise reason that this loss of deferral, and the consequent privation of a past noticeably distinct from the present makes it far more difficult to recognize any cleft between the self-presence of one's consciousness as interiority and the expression of that interiority through such media, in the same way that Derrida (1997: 7–8) argues that we come to associate our own voices with the interiority of thought through the "system of 'hearing (understanding)-oneself-speak' through the phonic substance", which "*presents itself* as the nonexterior, nonmundane, therefore nonempirical or noncontingent signifier", lending one's voice the authenticity of presence-to-itself. I would thus disagree with Friedrich Kittler (2010: 181) when he claims that the

> interruption of all feedback loops between a body and its doubles - whether in the mirror, in one's own internally stored body image, or in the approving eye of the other - precisely defines technical media.

Social media actually *amplify* this feedback loop to an unprecedented degree, such that our past is never separate from our present. "Under data processing conditions in realtime," writes Ernst (2004: 51), "the past itself becomes a delusion; the residual time delay of archival information shrinks to null".

Of course, these are not the first media forms to be accused of collapsing time into a perpetual present. McLuhan (1964: 270) makes the same claim regarding television, the simultaneity of which he argues "makes each of us present and accessible to every other person in the world", and Virilio (2012: 117) has illustrated in great depth the way in which electronic media have distorted our natural circadian rhythms, occasioning "a day defined by technological speed, in direct opposition to astronomical time". But what is so unique about these social media, which operate on the basis of storage and archival - in opposition to the ephemerality and continuous "flow", to use Raymond Williams' (2003: 77–120) term, of a linear broadcast medium such as television - is the way in which they intersect with the living present of one's experience. When Virilio (2012: 114) thus writes - in a case study that would now seem rather quaint - of the "stereophonic and stereoscopic doubling of space and time" produced by video-cassette recorders, which break down the cyclical

continuity of solar time by offering a supplementary day grounded in the recording of real-time broadcasts, what he is describing is a still-apparent delineation between the seemingly non-deferred presence of televisual broadcasting and the objectified past of video. Social media do not offer such an easy comparison: the data of the present is transformed into entries within the archive so rapidly, at the same time that such entries are reanimated in the feedback loop between the archive and its users, that any perceptible delay between memory and presence vanishes.

To reiterate, it is this collapse of the past and present that separates the temporal, dynamic archive from its traditional, spatially organized predecessor. One may look at a Twitter feed or Facebook wall and conclude that they organize and arrange events spatially - and hence synchronously - in a manner little different to that of a traditional written diary or calendar; the problem with such an observation, however, is: firstly, that such data is not merely inscribed spatially in the manner of a written page, but is itself stored time-critically as constantly circulating electronic signals - "constant transfer replaces storing", as the "memory-units of the past, mostly on paper, are increasingly replaced by dynamic, temporal forms of interim archiving in digital space" (Ernst 2005: 98–99); and secondly, that the spatial arrangement of such data within their visual interfaces belies the fact that these are mere surface effects concealing the true processual operability of the archive itself. From the perspective of the interface, be it on computer or smartphone, ''the delineation between past, present and future, between here and there, is now meaningless except as a visual illusion" (Virilio 1994: 31) - the way in which we are fed this data, in other words, is just an epiphenomenon, largely tangential to the operation of the archive itself, which is seemingly in a constant state of becoming.

Secondary orality and ephemeral media

The risk, however, when making these observations regarding temporality is that we treat the effects of all social media as being largely homogeneous, thereby failing to recognize that there are many quite different temporalities operating both within these platforms themselves, and within the associated milieux amongst which they have emerged. These categories of the synchronic and the diachronic, as Stiegler (2009b: 52) notes, are entities that "one must distinguish without opposing, and which are always in the process of composing" - as appealing as it is to accuse new media, in whatever form they presently take, of compressing time into a perpetual present, I would contend that what we really need is a more subtle analysis of the way in which all media forms negotiate the tension between synchrony and diachrony.

To take just one example, the rise (and possible precipitous fall, given recent data breaches) of Snapchat, the photo messaging app designed specifically to address privacy concerns related to the archival mechanisms of other social media platforms (and even just those of smartphones themselves) by preserving messages for a maximum of ten seconds before they are deleted. Putting aside the obvious limitations of this model (the fact that all smartphones have the capacity for screen captures largely defeats the utility of the app), the intentions of its design - which in many ways follow common tactics of users of other forms of social media, who almost immediately delete posts and messages in order to evade surveillance (parental or otherwise) and gain some sense of autonomy over their means of communication, and which have begun to be adopted by other platforms, most notably the dating app Tinder - provide us with an interesting case study for examining the diverse temporalities of these different platforms, for Snapchat's bias toward synchrony operates not on the model of archival, but rather, on a decided refusal of archival.

Platforms such as Facebook, as I have already illustrated, still operate on the basis of storing information - in fact, they are almost entirely reliant upon it, both operationally and financially. Something akin to Snapchat, for comparison, attempts to replicate (largely unsuccessfully) both the spontaneity and the *ephemerality* of spoken communication, such that we might compare it more to the telephone, for instance. In one sense, we can see such platforms as more recent manifestations of the phenomenon that Walter J Ong (2002: 11) refers to as "secondary orality," which he defines as "a new orality … sustained by telephone, radio, television, and other electronic devices that depend for their existence and functioning on writing and print." In this case, the oral nature of the communication lies primarily in the way that it is designed to mimic the perceived immediacy of spoken language, which is derived at least in part from the way in which speech is seen to be accessed not within the objectified form of inscription - which positions it as part of the past that has already passed from the present - but rather, in the purported plenitude of the living present.

"Speech and the consciousness of speech - that is to say consciousness simply as self-presence - are the phenomenon of an auto-affection lived as suppression of differance," writes Derrida (1997: 166). That is, in simple terms, the immediacy of the aforementioned feedback loop between the experience of hearing oneself speak and that of thought more generally produces the sense that one's speech - and hence, one's spoken conversations - take place in a presence that can never be adequately reduced to the form of inscription. In the logocentric tradition of Western metaphysics, technical media from phonetic writing onward have had to struggle against the perception that they in some way challenge or degrade this presence or synchrony in the name of diachrony. Yet things

are not always that simple. Whereas archival-based social media such as Facebook and Twitter risk collapsing the past into the present, their generative operability engendering a generalized synchronization of their users' behaviour in line with the contents of the archive to which they constantly contribute, something like Snapchat - at least in theory - achieves a quite different form of synchrony based upon the semi-voluntary destruction of the communications that it has facilitated as recorded digitally.

The semi-voluntary nature of such a destruction, however - that is, the fact that one chooses to use such an app precisely because of its ephemerality, rather than a paucity of other options - is crucial for understanding the dynamics of such a medium in the twenty-first century. "Where primary orality promotes spontaneity because the analytic reflectiveness implemented by writing is unavailable," observes Ong (2002: 134), "secondary orality promotes spontaneity because through analytic reflection we have decided that spontaneity is a good thing". One of the difficulties that we face today is not that we necessarily lack agency in terms of our everyday choices; rather, it is that the choices we make are so extraordinarily mediated by these technologies of synchrony that spontaneity in any genuine sense - the irruption of the truly new; the unexpected - is replaced by a perpetual need for novelty that calls into question the very possibility of such a temporal rupture. One must ask whether diachrony, in the sense that I have described it in this paper, is only salvageable at the expense of such a demand, and what this would mean for a progressive politics that, as the very term suggests, has always grounded itself in a futurity that marks a decisive, and in some sense utopian, break with the present.

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