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The Future of Nostalgia: Loss and Absence in the Age of Algorithmic Temporality

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Abstract

For human beings, accepting loss and absence is a constant effort, particularly when it comes to accepting their own finitude, which becomes apparent as time passes and people leave us. This is closely linked to nostalgia and the processes of remembrance. While there are many nuances, we can distinguish between constructive and destructive nostalgia. The former cannot accept absence or the passage of time and deludes itself into thinking that it can recover what has been lost. The latter recognizes the temptation to recover everything, but knows that this is impossible, and accepts that the past can only be preserved by transforming it into something else. Contemporary technologies that use algorithms can exacerbate the former tendency by manipulating memory processes and distorting the meaning of the virtual. The aim of this contribution is to shed light on the dynamics and implications of nostalgia as it is influenced by algorithms. To this end, it is divided into three stages. In the first stage, nostalgia is examined for its “restraining” power in relation to deterministically progressive philosophies of history, also through a reference to the original philosophical meaning of the term ‘virtual’. In the second stage, the relation to progress is thematized through a reflection on technologies and artificial intelligence, which uses algorithms and devours our data. In the third stage, it will be shown how thinking about nostalgia and artificial and algorithmic ‘intelligence(s)’ can be a valuable test case for distinguishing between the uses and abuses of nostalgia, between constructive nostalgia and destructive nostalgia.

Keywords: nostalgia; ethics; absence; algorithm; progress



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1. Introduction

This paper aims to explore the intersection of nostalgia and temporality in the contemporary era. To this end, it is divided into three stages. In the first stage, nostalgia is examined for its “restraining” power in relation to clearly and deterministically progressive philosophies of history. Nostalgia would thus be the counter-song, to the confidence in progress, the emotional tonality proper to the angel of history contemplating the ruins. To understand the right balance between challenging the linearity of time and the illusion of an eternal presence that never fades, it is necessary to consider the original meaning of ‘virtual’. This tendency is amplified by algorithms, making the grieving process increasingly complex (Conte 2020). The famous episode of Black Mirror, ‘Come Back to Me’, is emblematic of the contemporary distortion of the concept of virtuality. The story follows a young woman who has lost her boyfriend and meets his virtual simulacrum, created using the traces he left on social media. She then becomes addicted to it. This reference provides an example of the various deathbots that faithfully reproduce every

aspect of the deceased's life, providing the illusion of their presence. In the second stage, the relation to progress is thematized through a reflection on technologies and AI, which uses algorithms and human data or traces. In this perspective, there is a disturbing fusion between nostalgic attitudes and the most advanced technologies: memory is induced and shaped by platforms, through the collection of past data and traces, based on which the algorithm proposes and re-proposes future emotional attachments under the banner of repeating the identical. For example, the predictive algorithm that determines personalized content selection and "interprets" behavior tends to exploit feelings. It does this not only through the well-known phenomena of polarization linked to echo chambers. These are also a form of repetition of the identical. It also does it by proposing content or memories that belong to the user's past. The two examples given here—the collection of data based on past choices that influences the future, and the virtual simulacra of deceased people filling the absence or death—refer to a nostalgic concept linked to repetition and the past as it has been. Thus, in the third stage, it will be shown how thinking about nostalgia and artificial and algorithmic intelligences can be a valuable test case for distinguishing between the uses and abuses of nostalgia, between constructive nostalgia and nostalgia that condemns to repetition and destruction. In fact, it will be noted how the second type of nostalgia is stimulated by the use of the digital and the virtual, which represent as many obstacles to the processes of memory and the elaboration of mourning, since they force an experience of temporality related to a perpetual present, whose only and deadly desire is to return to an origin that never existed, in which the identical is repeated without variation. It is also important to consider that algorithms and AI, out of nostalgia, only offer the illusion of simultaneity, imagining and living an imaginary eternal present, and thus paradoxically fueling oblivion by denying memory the possibility of elaboration and the acceptance of loss, which is definitively detached from the constitutive human finitude.

In the contemporary ethical-anthropological and socio-political landscape, the distinction between destructive and constructive nostalgia is fundamental. Destructive nostalgia is almost always regressive; it desires a return to the past because it is perceived as superior to the present. Memory and its manipulation play a decisive role in this process because it selects episodes—real or imagined—that confirm this idea. Algorithmic technologies, especially those that govern social platforms, risk manipulating our memories by using the traces we leave behind to reproduce past choices or experiences in the future. This mechanism often ends up blocking the emergence of the new, providing the illusion that nothing is lost and that everything remains the same. Thus, contemporary technologies track everything without the awareness that usually accompanies human processes of remembrance.

However, there is another meaning of nostalgia which acknowledges absence, accepts it, and lets go of what can no longer return, albeit painfully. In these cases, memory is not merely a collection of recollections; it is an active process involving forgetting, loss, absence and the knowledge that even tragic aspects of the past can resurface. However, the past cannot return in the way that social media platforms bring it back. It can return because humans do not learn from history, and progress does not guarantee that we will be permanently freed from those evils: constructive nostalgia plays a crucial role in detecting evil that could come back. Moreover, constructive nostalgia pays attention to possible futures buried in the past. In contrast, the predictive algorithm, which calculates in terms of quantity rather than quality, ignores what has been forgotten and would be worth remembering, and merely repeats what has been most popular.

Today, what we need is constructive nostalgia, which opens us up to the future. This contrasts with destructive nostalgia, which takes us back to the past that should not be

replicated. We must make room for what did not happen in the past and address the injustices that still cry out for justice.

Nostalgia, which is conveyed and amplified through algorithms, risks turning into destructive nostalgia, which reproduces the identical and fixes people to their past without the possibility of opening to the future. In doing so, it prevents people from processing what has happened.

Paradoxically, the era of technological acceleration has also been defined as the 'era of nostalgia'. This is largely due to progress: on the one hand, constructive nostalgia warns against excessive optimism about progress and helps us reconnect with a buried and forgotten past. On the other hand, destructive nostalgia no longer acts as a 'signaler' against excessive optimism about progress; instead, it seeks to recreate the past exactly as it was, or as it is believed to have been. In this sense, it aligns with predictive algorithms that manipulate our memories by repeating the same thing. This unprecedented alliance between the old and the new risks amplifying the destructiveness of nostalgia for the identical, which builds barriers instead of bridges.

The progress that celebrates the future and innovation—including the use of algorithms in our interactions and memory processes—is increasingly based on manipulating our desire for the past.

2. Nostalgia and Automatism of Progress

Today, the experience of nostalgia is investigated by many disciplines and from different angles. Preliminarily, it is defined here as an ambivalent "emotional tonality" (Bollnow 2009), not amenable to judgment since it belongs to feeling, but certainly amenable to analysis that distinguishes different types of it. A series of studies, from the seminal work of Davis (1979) to that of Boym (2001), to cite two examples, help to clarify uses and abuses, personal and collective, of the nostalgic feeling, recognizing in this feeling not only closure and retreat toward a past that seems not to pass, but also the capacity to give voice to past and unfulfilled desires, the possibility of displacement, the tension toward a biographical, narrative and historical continuity that cannot be ignored. To unleash the ethical-anthropological potential of nostalgia open to the future and to understand the extent to which nostalgia and technologies interact today, in this first section, nostalgia is thematized because of its "restraining" power vis-à-vis deterministically progressive philosophies of history. Nostalgia, which represents the suffering gaze turned backward, would thus be the counterpoint, the caution, to our confidence in progress, the emotional tonality proper to those who contemplate the wreckage of history's triumphal march, which overlooks the negative in the name of humanity's irresistible advance toward the better (Benjamin 1999, p. 456 ff.).

The gaze proper to such nostalgia should not be imagined as the frustrated attitude of one who regrets, but rather as the attraction and listening attitude directed toward possible, but never realized, earlier, lost and potentially just futures. In relation to the progressive philosophy of history, it is possible to recognize an ambivalence of nostalgia: the first meaning defines it as pastism, a desire to return to the identical without change; the second moves from the acceptance of the impossible grasp on the past that is never a possession, and from the critical force that allows one to grasp the earlier futures once considered possible and now forever lost: not to recover them, but to debunk the normativity of linear and cumulative history, which does not inevitably move toward the best, but indeed leaves behind unexpressed and unexplored possible futures.

The past and impossible anterior future expresses the essence of the nostalgic phenomenon as the longing for a past that never was, addressable only to the present and the future; it also expresses distrust in the ideology of linearity, for the benefit of a rethinking

of historical temporality as virtually “present.” The normativity of such virtuality would consist in the commitment not to forget the lost potentialities and the warning that the past can return. In addition to Walter Benjamin and his critique of the linearity of progress, it is [Derrida \(1994\)](#) with his hauntology who delineates the contours of a liminal virtuality whereby the past is not lost and yet not preserved, does not disappear even though it cannot be grasped, but contains those specters that one cannot remove and remain so; this suggests the need to set aside the identical ([Adorno 1973](#); [Levinas 1969](#)). With Fisher, one can define hauntology as “agency of the virtual or the absent” ([Fisher 2014](#), p. 18).

Understood in this way, temporality is not mere linearity that devours the present by transforming it into the past and prepares itself for the future, but it is coexistence between different planes, whereby nostalgia is fear of the return of the past much more than sorrow for the impossibility of that happening. This confirms that nostalgia is an ambivalent feeling. It can manifest as a longing for the past or a desire to relive it, or as a critical reflection on the past, either to grasp its unexpressed potential or out of fear that it might return. Therefore, rather than being a desire for the past to return, nostalgia could be an awareness that it could return and that this would be destructive. Therefore, the pain of return, the main meaning of the term ‘nostalgia’, would not be the desire to go back—which would constitute regressive nostalgia—but the terror of history repeating itself. In this sense, the figure of the tightrope walker in Sebald’s famous novel ([Sebald 2018](#)) is emblematic: the tightrope walker maintains his balance to avoid falling into the ‘already been’.

A healthy experience of nostalgia considers the past as a virtual backdrop that can always be actualized, putting the automatism of progress into perspective. In contrast, a distorted experience of nostalgia wants that past to be present, always in the foreground. Unfortunately, today’s technologies contribute to making this latter interpretation of nostalgia a reality because they reduce the concept of virtual to something that provides the illusion that everything is present and accessible without accepting absence and loss.

The distinction between different types of nostalgia, in relation to the linearity of time and the concept of progress, involves the idea of virtuality. Let us explore the underlying reasons. The experience of virtuality does not arise from AI or algorithms. Rather, it is structurally linked to the awareness of temporality: the present and the experience of it are always situated within a panorama that considers the past and the future as horizons that, although seemingly unreachable, are accessible to consciousness through a process of actualization. With regard to the past in particular, the task of such actualization falls to memory. Furthermore, it is virtuality that we are talking about in the experience of daydreaming, where we realize that blurring the contours does not necessarily confuse matters, but rather enhances the experience based on what is not and what could be. Virtuality is ultimately the human way of dealing with absence in the face of an experience such as loss, with which one comes to terms by insisting on human ways of making that absence present. Undoubtedly a job, a task and an effort.

This anthropologically informed concept of virtuality is reduced and stripped of all its ethical, political and historical significance in the digital environment. Virtuality was the seat of the imagination, of its modification and adherence, or lack thereof, to common life experience. It was the seat of everything imaginable before anything was possible. Nowadays, invoking the virtual no longer involves blurring the lines between presence and absence; rather, it involves deluding oneself into thinking that the possibility of loss can be erased. People are becoming increasingly satisfied with disembodied surrogates for presence, which is not always for the better.

The virtual is therefore an experience that has belonged to humans for a long time, even before its hybridization with machines. We all experience time based on this pattern, bringing images, memories, emotions and sensations to the fore or leaving them in the

background. However, this always involves effort and a necessary—perhaps painful—selection process. The outcome of this process is never known in advance, but we undertake it based on our current experiences. We can continue in this way with our experience of time without ever actualizing certain contents that remain virtual. We know that we have lost something and that, to recover it, we must be willing to transform it.

Today, however, the ‘virtual’ always means potentially accessible, without any effort of selection on the part of the human mind. Strictly speaking, it is therefore impossible to lose, but at the same time impossible to consciously preserve: this is precisely how we experience traces in the real world, on the web, and those collected by algorithms: we consider all traces to be of equal importance. The accumulation of our traces on the web is not selective or qualitative, but purely and easily quantitative.

Therefore, the virtual realm and the work of memory, which actualize their contents by modifying and transforming them, lead us to re-evaluate the notion of linear time and, consequently, progress. This is because the past and, to a certain extent, the future converge in the present after considerable effort on the part of the individual. This undermines the notion of the inevitability of progress. As a matter of fact, this arduous and transformative recovery—or actualization—of the past and openness to the future, which becomes so vivid as to seem present, redefines the concept of exclusively linear and cumulative temporality. This concept pays no heed to the past’s ruins and does not critically reflect on the future’s potential, instead trusting in the driving force of progress—Benjamin’s irresistible wind, which pushes even the angel of history forward.

Constructive nostalgia plays a key role in this process, inviting us to delve into the virtual realm and attempt to bring the past into the present, modifying it. Conversely, destructive nostalgia, while also criticizing progress towards a better future, aims to recover the past exactly as it was—identical to itself—without processing, selecting, and transforming what has already been into something else.

Furthermore, the imagery of a linear history does not reckon with loss because it often contemplates within itself a cumulatively without remnants, abandonments, unfulfilled and impossible promises for the “submerged”. Science of ghosts will then be that knowledge which cannot forget, while knowing that it cannot redeem the past and fill in the constitutive lack which is implied in human finitude. As previously stated, nostalgia becomes an emotional tonality that acts as a ‘signaler’ with respect to an ever-possible return of the virtualized past, drawing attention to the instances of justice that come from the past and that one can only try to reorient to the future, and not to those who have been crushed by injustice (Tanner 2024c), oppression and subalternity, who have died of injustice.

If from the collective point of view nostalgia oscillates between pastist declension and openness to a future that holds with it the remnants of the past as signs of an irretrievable absence, but still has something to say, from the personal point of view, nostalgia can act as a need to be, to remember, to present everything. Nostalgia then seems to tend toward the desire for absolute transparency, which is not only a desire to remember everything, but above all to narrate oneself without shadows and without gaps, forgetting, however, that narrating could involve self-deception and rewrites that do not always reflect reality, often through a more or less conscious manipulation of memories (Riesewieck and Block 2023). Instead, a nostalgia that stands as a critique, while acknowledging the temptation of desire described above, accepts the dulling of memories, their deformation, and their manipulation by tracing such phenomena not so much to a procedural defect, but to the very nature of the processes of recollection, which cannot be corrected or perfected by recourse to quantifying artificial intelligences. If narrating also serves to understand oneself, as many argue, that act, however, implies the pitfalls of self-deception, manipulation, and the ever-renewing revisability of memories.

As [Riesewieck and Block \(2023\)](#) have recently shown by bringing examples relating to the use of algorithmic technologies to assuage the anguish of loss and death, if recollection is more easily accessible when it becomes part of a narrative, then that process is not in itself a guarantee of truth. It is possible that the process of remembrance leads to distorting the contents of memories, and remembering becomes a living and useful operation for the present. For the authors, “With each update we distort memories more and more because unconsciously a series of desires, fears, prejudices, and self-deception mechanisms move our memories further and further away from reality” (p. 125). Algorithmization of memories and remembrance processes accentuates such drift, with the aggravating circumstance that if humans also manipulate their memories to give themselves a break from pain, thus diluting its intensity, the possibly beneficial function of self-deception disappears altogether when we entrust it to the algorithm.

In other words, if nostalgia is a desire to return, it often deceives itself, and such deception is intrinsic to the nostalgic experience, which does not aim at the truth of the past, but perhaps rather at the past as one would have wished it to be, and it was not. Narrating everything without forgetting and without imprecision would imply—simultaneously—the fulfillment of the nostalgic desire for the identical and its end, as nostalgia lives off a fuzzy, imprecise, and troubled memory: it is the memory of the absent. Nonetheless, nostalgia that disregards such self-deception runs the risk of removing the negative, counterfeiting memories under the banner of the fullness of happiness that, despite being evoked, was never achieved: technology today is a powerful cosmetic tool for removing the negative, thus allowing painful episodes to be ignored for the benefit of a beautifying retouching of the past that becomes ready to be exhibited ([Campanella and Dassù 2020](#)); or, again, it intensifies such manipulation by making it accessible but also completely useless for the very processing of loss.

3. Without Absence: Memory Overload, Impossible Erasure, and Induced Nostalgia

The link between nostalgia and progress is thematized in this second section through a reflection on technologies and artificial intelligence, which use algorithms starting from a potentially unlimited accumulation of data and traces. The initial assumption concerns a modification of temporal experience through algorithms. Time, from being an unfathomable mystery and impossible to modify, becomes transparent and at the same time unmanageable: new technologies transform the perception of time, which, as it accelerates, multiplies the traces left by human gestures, makes things in the world rapidly obsolete, and cultivates the anxiety of loss with the implicit reassurance that nothing will be lost. The speed of passing time, from being a supremely subjective experience, is measured and brought to awareness not so much by the discomfort of acceleration, which albeit is given as a sign of the crisis ([Rosa 2015](#)), but rather by the accumulation of traces left behind, of objects “lost” during the unstoppable race toward a motionless future almost indistinguishable from the present. The illusion is that humans no longer feel the pain of impermanence, being satisfied with the objects they leave behind that never permanently disappear. As was explained above, this illusion of lossless simultaneity can be traced back to a distortion of the experience and concept of virtuality. Similarly to regressive nostalgia, which seeks to recreate the past without processing it, the ‘digital’ virtuality recreates the past without the effort of actualization because it never disappears completely; it collects without selecting, leaving no void or lack.

One of the consequences is that the past never passes entirely, and predicting the future becomes increasingly difficult in the absence of gaps. If the algorithm provides the content toward which to feel nostalgia even before the nostalgia is experienced, even by

sweetening the memory of it, the role of nostalgia as a ‘sentinel’ feeling capable of looking for the possible future in the past or, again, capable of walking in the company of the absent disappears altogether, to the benefit of a commodification that feeds the illusion of being able to buy what does not exist and of being able to stop time, living as if one were eternal.

Within such relevant modification of human experience, it must be recognized that the interaction between the experience of nostalgia and new technologies is articulated, layered, and multidimensional (Niemeyer and Siebert 2023). It is worth outlining some of the levels at play based on a conceptual scheme that moves from general considerations to specifics that illuminate unimagined regions of human experience. In the first instance, at a trivial level, the connection is due to the fact that contemporary technology is mostly seen as the best flywheel for humanity’s landing in the future, which is instead, and should remain unprecedented, barely imaginable and unpredictable. Already at this level, our ‘common sense’ can only be refuted, for one can say that the algorithm and its way forward are essentially nostalgic, since they predict the future based on past choices (Tanner 2024c). Tanner accurately describes such predictivity of the future induced by repetition of the past: “predicting the future with data from the past does nothing more than repeating the past [...]. Once the data is extracted, the algorithms process it to satisfy users’ desires, to keep them scrolling and consuming, and to predict the future. But a future predicted by algorithms will remain stuck in the past” (Tanner 2024c, p. 203). This is the deterrent sense of nostalgia, the one that turns to the identical and would like to recover it.

On further examination, the relationship between nostalgia and technology is located within the disturbing framework of an era that has been called both “the age of nostalgia” and “the age of algorithms”. At least formally, this aspect justifies the unedited interplay between nostalgic attitude and the most advanced technologies. Within this framework, the forms of interaction between nostalgic experience and algorithmic experience are diversified: one can refer, for example, to “the generation of nostalgic content through video and streaming platforms”, or to the algorithms which give life to the photographs of one’s “absents”, even to the point of virtually creating the possibility of “meeting” one’s dead; or, to the modification of virtual content to give it a “nostalgic quality” (Brzeziński 2024, p. 94).

Several further examples could be given. Deep Nostalgia uses facial recognition technology to animate videos and photos of our ancestors; Facebook’s ‘On This Day’ feature suggests what to remember and when; Google Photos selects moments from our lives for us; and there are even deathbots, griefbots, and chatbots that enable us to chat with the deceased, raising many ethical issues, among which the so-called “post-mortem privacy”. Not to mention vocal reconstruction algorithms that can reproduce the voices of deceased individuals. One of the most famous and widely discussed examples is documented in the YouTube video ‘I Met You’, in which a mother meets her deceased daughter through virtual reality.

Some studies confirm that the algorithm not only follows past tastes, but also creates nostalgia as a shared sensation through esthetic structures, filters, recommendations and visibility models (Brown et al. 2024). Other studies prove that populist parties use digital memory to create and spread nostalgic content, manipulating personal memories for their own ends (Frischlich et al. 2023).

However, one might think that we are in the presence of mere cultural, medial phenomena related to artistic production and the culture industry, disengaged from the ethical-anthropological questions of the relationship between life and death, memory and forgetting (Sisto 2020), limit and desire. On the contrary, the experiences reported here investigate how the algorithm modifies the very experience of nostalgia, which inevitably involves the transformation and hybridization with technological devices of human processes of remembrance. In this sense, the point is not to emphasize the unprecedented scope of the

exonerating intermingling of memory and memory techniques, but rather to grasp the intensification, this one unprecedented, of the need to reminisce by virtue of a temporal acceleration that intensifies the fear of the obsolete and of replacement, and, likewise, in the first instance seems to increase the possibilities of retaining everything, albeit illusorily.

Today we refer to “re-mediated” nostalgia, mediated twice, in the sense that it is induced by a double process of mediatization when, for example, old photographs of missing persons are brought to life, on the one hand inducing nostalgia through the commodification and translation into data of the same experience, but on the other hand eliminating at the root the very condition of possibility of nostalgia, namely the loss that ultimately refers back to absence. In this sense, nostalgia tends to flatten into a desire for presence that is satisfied with the surrogates of presence itself, without being able to accept finitude and to “stay” in the company of the absent. Among the abovementioned examples, the link between “re-mediated” memory and algorithmic nostalgia has been investigated by examining the DeepNostalgia experiment developed by MyHeritage (Kidd and McAvoy Nieto 2023). According to the authors, “DeepNostalgia’s shift from photo to video reshapes and remediates memory such that it becomes both real and unreal, immediate and remote, comforting and disturbing” (p. 635). The so-called “hypermediation” of memory influences its very nature, not only because it inserts an additional medial refraction between the remembering self and the object of remembering, and because it makes improbable the exact correspondence between the reality of the past and its adaptation within medial containers, but also because it deforms, filters, and connects according to complex logics the memories and the human work on them. The hypermediation of memory opens up the possibility of an algorithmic nostalgia, that is, algorithm-induced, distorted in its form and content, thus eliminating any possibility of working the negative and making the past seemingly accessible: a past that does not need to return, because it has already been here all along, it has never gone, never really become past.

One cannot feel nostalgia for what is not truly past; therefore, such algorithmic devices not only modify the experience of nostalgia, but attempt to eliminate it altogether: in an almost paradoxical way, the objectual correlates of such feeling should alleviate nostalgia, but they multiply it, because they are destined to re-propose a failed experience of presence, an almost ghostly and utterly disembodied presence. What Tanner (2024a) calls foreverism well describes the disappearance of the experience of nostalgia, which means sorrow for the temptation to awaken the dead and the awareness that any awakening would be impossible or dangerous, along with the other awareness, whereby memory must be made of what is absent, for justice to be attained. Algorithmic nostalgia is not hauntological, because it does not distance itself enough from a metaphysics of presence, which it does not disavow, but of which it can only be a self-condemning surrogate for the failure of a recovery of presence never fully experienced as such. As much as virtuality recalls the idea of liminality, *rêverie*, and daydreaming, it cannot be argued that such attempts to bring back the dead are an updated version of hauntology (Tanner 2024b), insofar as this happens by virtue of a memory that is induced and shaped by platforms, of a collection of data that nails us to our past, on the basis of which the algorithm proposes and re-proposes future emotional attachments under the banner of repeating the identical (Pierosara 2025).

The manipulation of the processes of recollection under the banner of the totality of memories to be contained proceeds by transparencies and, almost paradoxically, encourages forgetting: the more memory becomes technocratic and reliant on external supports, the less we see the need to retain it, even by striving. The algorithm does not forget, but neither does it remember. Under the banner of the totalizing, omni-remembering claim of the algorithm underlying artificial intelligences, one can also interpret the so-called algorithmic hallucination, which seeks to fill, through fiction and plausible correlations,

data gaps, leaps between datasets, by inventing links and stories distant from reality (Brück 2024). One could say that guided memory, “facilitated” by the algorithm, chases the Borgesian model of Funes, the memorious (Benanti 2020), and aims at the totality of precise remembering; however, the inhuman remembering of everything risks turning into the forgetting of everything.

4. The Dangers of Nostalgia for the Identical

This section will highlight how reflection on nostalgia and artificial and algorithmic intelligences can be a valuable test case for distinguishing between uses and abuses of nostalgia, between nostalgia that is constructive and nostalgia that condemns to repetition and destroys: in fact, it will be noted how this second type of nostalgia is fostered by the use of the digital and the virtual, which represent as many obstacles to the processes of remembrance and elaboration of mourning, since they force an experience of temporality nailed to a perpetual present, whose only and deadly desire is to return to an origin that never existed, in which one hopes that the identical can return to repeat itself without variation, even when it is traumatic (Kasper 2021).

The nexus between the manipulation of temporalities, memories and their datafication—algorithm-induced nostalgia—and the unlimited extension of access to personal and collective memories in its ethical-anthropological implications can be explained by referring to an idea of nostalgia that deals with loss and lack, and reckons with absence. In order to understand the directions that memory and nostalgia travel in the age of “technostalgia” (Niemeyer and Siebert 2023), it is necessary to reflect on a definition of nostalgia explained as an emotional tonality that accompanies the experience of absence, instead of erasing it, and to reflect further on the possibilities, inherent in such feeling, of returning to a past that continues to affect the present. First, then, it is necessary to distance ourselves from a possessive and proprietary interpretation of the self as it defines itself through “one’s” memory, “one’s” own memories, and “one’s” own relationships. The proprietary and possessive key of reading memories, memory and relationships according to people, places, and times is in itself anthropologically problematic, because it insists on an objectifying conception of experience, as if one could reduce it to a possession to be kept intact; such a reading is even more misleading insofar as the object in question is the content of a memory, which is not static. Rather, it is constantly changing. It is in a dynamic relationship with oblivion and is best understood as an active process rather than as a noticeboard on which our memories are preserved unchanged, as Bergson’s studies (Bergson 1896) have shown. It is this feature that makes it impossible to objectify memories. On the contrary, the algorithmic medium intensifies this proprietary and possessive relationship with the past, insofar as it quantifies, datafies, and links traces left in the network, and as it “interprets” them as so many objects of exchange, consumption, buying and selling.

It is not difficult to understand that such a proprietary posture is associated with a reading of temporality and its irreversibility that reflects a totalizing claim incapable of accepting any loss; notoriously, the “disappearance of loss” is one of the evils of our times (Fisher 2014). The desire to retain everything—or to recover everything—is not secondary in this attempt to objectify memories by ending up making them commodities. The algorithm does not invent any novel narrative of the human, but it enhances and intensifies the mythology of totality, of limitless and infinite possibilities. Without loss, without lack, and without the ability to recognize in the experience of loss a trace of the absence that structures us and is part of our condition of finiteness, even nostalgia is at risk of being reduced to frustration over a loss that we mistakenly believe we can fill, settling for the surrogates of those who are no longer there, either by choice or destiny. “Closed” nostalgia repeats the identical, aims at the recomposition of wholeness, denies and removes loss

as a trace of absence, and does not completely resign itself to the dimension of finiteness, imperfect but accomplished, spent, irretrievable. “Open” nostalgia (Jankélévitch 1974), on the other hand, would be this walk in the company of the absent, which takes the spectral forms of a recurring torment, fears the return of the unjust past, imagines a future being aware that the past can return, cultivates the elsewhere as a concrete possibility of justice because it recognizes the paths interrupted in the past and abandons the totalizing claim, thus giving other forms to the absent.

Finally, as previously stated, the interlocking of nostalgia and algorithm produces a misleading shift with respect to the dynamics of virtualization. On the one hand, the nostalgic experience per se, with its capacity to transport “elsewhere” those who experience it, blurs the contours between past, present and future, not only because, trivially, its desire is to return and therefore it must be able to consider the possibility of such a return; more profoundly, nostalgia that reckons with the absent recognizes that the past has swallowed possible futures with it, knows how to listen to its scattered voices, and is aware of the pain that would imply any return to the identical that has already happened. For these reasons, it blurs the contours and “virtualizes”, that is, it makes potentially possible, the journey into past time and the forward projection of future time, precisely because it abandons the linearity of time for the benefit of an ever-possible return and an ever-possible leap that evokes lost moments and is willing to recognize continuities or analogies with the present. If this operation performed by nostalgia can be called “virtualization”, one can understand, finally, the reason why nostalgia has a very strong connection with contemporary technologies of preservation, remembrance, and longing for the past. Nonetheless, if the virtualization of different temporalities can contribute to not taking for granted the cumulative and progressive linearity of time, induced, algorithm-mediated virtualization risks blurring the contours between different temporalities in an arbitrary way, since it moves from the illusion of being able to have, be, remember everything simultaneously, without loss, lack or absence, without the human efforts involved in the processes of actualization, which always imply a selection and a transformation—not a mere recollection—of memories. Medial virtualization and algorithmic nostalgia are thus misleading because they do not assume finitude as a constitutive human trait and move within territories that forget corporeality in the name of an operational, impersonal, useless and unlimited immortality.

5. Conclusions

To the test of algorithmic technologies, nostalgia is confirmed as an experience, an ambivalent and elusive emotional tonality. One can trace its conditions of possibility, but cannot preliminarily determine its forms, limits, or resources. The inappropriate use of traces of our past by predictive algorithms enables us to distinguish more clearly between destructive or regressive nostalgia and constructive nostalgia that is open to the future. Such algorithms fuel the former type of nostalgia and make it difficult to experience the latter, which accepts loss and absence as fundamental human experiences. Constructive nostalgia moves from the recognition of an absence that justifies it and, at the same time, of a temptation, that of totality, by giving in to which we delude ourselves that we cannot forget, that we can console ourselves in the virtual presence of the missing, that we can avoid a work through loss that is not sacrificial but essential to defining ourselves within a network of relationships whose fabric is memory and oblivion. The non-acceptance of loss, the illusion of totality as an extension of all possibilities and of the unlimited can only establish a nefarious and counterproductive imaginary (D’Alessandro and Ferzetti 2024) that denies any possibility of self-limitation (Castoriadis 1983) and condemns the human to exclusionary and identitarian feelings based on the shared desire for imagined roots.

Instead, our communities need to be open to strangers who do not share our—often imagined—past, but with whom we can share and construct a common future.

There is a finite completeness that does not seek redemption, but looks to the limit as a possibility of ever new, further configurations. The remedy for the pain of absence is not the fullness in which and to which nothing is lacking, but the acceptance of an irreversibility of the past that, even in its spectral form, must be kept in mind, listened to, without pretense of salvation, without the possibility of reknitting broken threads. Returning to the identical, or to a state of “non-loss”, is not possible; instead, one can learn to inhabit an elsewhere that is more intimate than any overt intimacy, which disorients to the extent that the past becomes unrecognizable, becomes someone else’s, becomes of others and for others. Nostalgia for the identical becomes deadly because it returns to a womb that is remembered as hospitable but stifles any possible emancipation or divergence. The contemporary imaginary is made up of escape routes, and algorithmic nostalgia risks becoming the greatest escape route, and also the most deadly, if it does not train itself to recognize the signs of its own past even in a future it cannot master, at the right distance from the two excesses of those who remember everything and those who forget everything.

Our relationship with the past and memory is fundamental because it preserves the meaning of our personal and collective lives by accepting finitude and absence. In this sense, humanism requires us to reflect on the techniques and technologies that either facilitate or hinder our relationship with temporality. Finding constructive nostalgia that is open to the future is a valid antidote to the desire to preserve everything by going back in time. Everyone should be given a second chance if they have made a mistake or wish to free themselves from a burdensome past, without forgetting it, but rendering it less powerful and destructive.

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