Nostalgia and Mental Simulation¹

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1. Introduction: A brief history of nostalgia

The term *nostalgia* is said to have been coined by Johannes Hofer in his 1688 medical dissertation on *Heimwehe* or "homesickness", which was then thought to be a malady characterized by an incapacitating longing for one's motherland. Although he also employed the terms *nosomania* and *philopatridalgia* to refer to the same alleged disease, Hofer favored the term *nostalgia* because it highlighted two essential characteristics of the condition: the desire the return home (*nostos*) and the pain (*algos*) of being unable to. Initially, Hofer characterized nostalgia's symptomatology as including constant rumination about one's motherland, melancholia, insomnia, weight loss, anxiety, heart palpitations, stupor, fever, and lack of appetite and thirst. However, as nostalgia because a rather common diagnosis affecting primarily military and naval personnel², its medical description expanded, to the extent that, to quote McCann³, "nearly every symptom known to man [was] interpreted at one time or another as nostalgia".

At the time, physicians disagreed about the precise etiology of nostalgia. Hofer, for instance, took nostalgia to be a neurological disorder caused by "the continuous vibration of animal spirits through those fibers of the middle brain in which impressed traces of ideas of the Fatherland still cling"⁴. Years later, Scheuchzer⁵ proposed instead that the cause of nostalgia was a sharp change in atmospheric pressure, which would explain why nostalgia was predominantly found among Swiss soldiers fighting wars at lower altitudes—a curious geographical observation that motivated some physicians to

link nostalgia to damage in the eardrum due to the incessant clanging of Swiss cowbells⁶. But the topographic specificity of the disease was soon overridden by findings of nostalgia among soldiers from many other nationalities, including British, French and American, and by the suggestion that maybe some animals could suffer from nostalgia too⁷.

Eventually, the difficulty of identifying both etiological commonalities and physical abnormalities among its sufferers made nostalgia less of a neurological disorder to be treated by neurologists and physiologists and more of a psychopathological disturbance to be treated by psychiatrists⁸. As a result, by the end of the 19th century, nostalgia was no longer considered a neurological illness but rather a mental condition manifested by extreme sadness and longing for one's home, which led it be reclassified as a variant of melancholia. Soon after, inspired by Freud's writings on the topic, the psychoanalytic tradition took nostalgia to be associated with depression, but now the intentional object of nostalgia-i.e., that which the nostalgic state was about-was considered different from its cause. Specifically, it was thought that the desire to return to one's homeland was in fact caused, not by a geographical separation, but rather by the unbridgeable childhood experience of being removed from one's pre-oedipal mother. By distinguishing the cause from the object of nostalgia, psychoanalysts broadened the scope of nostalgia to include much more than one's motherland. Individuals exhibiting profound yearning for past experiences, bygone objects, long gone loved-ones, and even idealized pasts, could all be considered nostalgic⁹.

Not everyone accepted the psychoanalytic approach to nostalgia, though, and many refused to separate it from homesickness. Even in his influential 1941 review of the

literature, McCann links nostalgia to homesickness, although—along with the psychoanalytic tradition—he admits of broader interpretations of the term "home", so as to include not only geographical variations such as one's home town, city or state, but also more abstract concepts such as childhood experiences or bygone cherished moments. Even as late as 1965, Nawas and Platt still talked about nostalgia as synonymous with homesickness—all while complaining about the lack of clarity and rigor in its psychological study. Nevertheless, despite these disagreements, it is safe to say that by the beginning of the second half of the 20th century, the notion of nostalgia more or less described three common components¹⁰. First, a *cognitive* component: nostalgia was intimately associated with the retrieval of certain autobiographical memories. Second, an *affective* component: nostalgia was considered a pathological and abnormally debilitating negatively valenced emotion. Finally, there was a *conative* component: nostalgia involved a desire to return to one's homeland.

In the current paper, I challenge this traditional view of nostalgia on both empirical and conceptual grounds. I argue that although nostalgia should be seen as a mental event involving a cognitive, an affective, and a conative component, the traditional characterization of these components is mistaken. The view I argue for departs from the traditional one in several ways. First, it separates nostalgia from autobiographical memory. I argue that, cognitively, nostalgic events involve the mental simulation of possible events that may or may not have happened in one's own past. One can feel nostalgic about autobiographical events, but these are not the only events one can feel nostalgic about. Second, based upon growing empirical evidence, I argue that, affectively, nostalgic events are not negatively valenced but rather mixed-valenced,

which in turn can be explained as a discrepancy between the emotion attributed to the simulated event and the emotion felt when one is simulating the event. Third, I argue that although nostalgia does involve an element of yearning or desire, it need not be always for a return to one's homeland—not only because the desire can be about something else, but also because often returning to one's homeland does not remove the yearning associated with nostalgia. What I suggest instead is that, conatively, nostalgic events involve a desire to eliminate the affective discrepancy that yields the mixed-valenced emotion by trying to square the contents of the simulated events with those of the present conditions. Finally, I conclude with a brief speculation as to how the proposed view of nostalgia relates to an interesting yet underappreciated phenomenon: the fact that nostalgia is a powerful political motivator.

2. Characterizing nostalgia

To better characterize nostalgia, it is important first to clarify whether or not nostalgia is pathological. Since the notion of nostalgia was first introduced into the scientific literature as a medical construct, the default view was to think of it as a neurological illness. Eventually, though, nostalgia was no longer considered a neurological condition—not because a cure was found, but because it was re-catalogued as a psychiatric disease. Recently, the pendulum seems to be swinging the other way, as some scholars suggest that nostalgia is actually healthy and beneficial, implying that a lack of nostalgia may be a sign of a malfunctioning mind¹¹.

My sense is that both views are mistaken. Nostalgia is neither pathological nor beneficial per se. In fact, it is surprising that earlier scholars of nostalgia failed to note the patent contradiction in describing nostalgia as a debilitating and incapacitating state when

also making their case for the longevity of the notion with the historical example of Ulysses in the *Odyssey*. Homer tells us that thinking of home was painful and brought tears to Ulysses' eyes, but in no way the thought of going back to Ithaca was incapacitating. On the contrary, it was motivating: it gave him strength¹². That it took him ten years to get back home had more to do with Circe, Calypso, and Poseidon than with the debilitating nature of nostalgia. I am not implying, however, that nostalgia is never pathological. What I am claiming is that whether or not nostalgia is pathological or beneficial is independent of its nature. As an analogy, consider a related mental phenomenon: mental simulations about possible future events. Simulating possible future events is a common mental experience, and while for some people it is motivating and leads to planning and forecasting, for others it can be debilitating and lead to extreme worry and $anxiety^{13}$. The same is the case with nostalgia. For some people, it can be debilitating even to a pathological extreme, while for others it can be beneficial, even exhilarating, to experience nostalgia. Why would nostalgia be sometimes debilitating and sometimes fortifying is a topic of ongoing research¹⁴ to which I hope the current paper can contribute by providing a precise characterization of the three components of nostalgia.

2.1. The cognitive component of nostalgia

Mental states are intentional: they are about things¹⁵. Intentional *objects* are what mental states are about. Intentional objects need not exist, however. Superman, for instance, can be the intentional object of my thoughts, even though Superman does not exist. Additionally, intentional objects are different from intentional *contents*. Lois Lane

can entertain different, even contradictory, thoughts about Clark Kent and Superman, despite the fact that both names refer to the same individual, Kal-El. She can do so because the mode in which the intentional object presents to Lois is different when she entertains thoughts about Superman than when she thinks about Clark Kent. The mode in which an intentional object presents to ourselves when thinking about it is the intentional content of that thought¹⁶. In philosophy of mind, there are a number of approaches to cash out the relationship between intentional objects and intentional contents. One of the most promising ones is representationalism, according to which the intentional content of a mental state consists in the information carried by a representation—likely instantiated in our brains—suitably related to its intentional object. Given its prominence in contemporary cognitive psychology and neuroscience, and given that much of the evidence I will be discussing comes from these disciplines, I will assume that some form of representationalism is appropriate to understand the relationship between intentional objects and intentional contents.

With that caveat in mind, let us explore now the nature of the intentional contents and objects of the cognitive component of nostalgia. According to the traditional view, nostalgia is associated with certain cognitive states of autobiographical recollection specifically, with recollections of autobiographical memories of one's homeland. This view suggests that the intentional objects of one's nostalgic states are either previously experienced events, or perhaps previously perceived scenes, from one's homeland. However, as McCann observed in 1941, the term "home" seems to cover a rather large array of possible referents such as the house or the street one grew up in but also other locations like schools one attended or parks in which one played. Moreover, often what

people mean by "home" need not refer to any particular location, as when they refer to general childhood experiences, long gone friends or family members, foods, costumes, aromas, traditions, etc.

Batcho¹⁷ also revealed the multifarious nature of nostalgia's intentional objects. In this study, 648 participants from a wide range of ages (4 to 80 years of age) received a survey with 20 items, and they were asked to rate from 1 (not at all) to 5 (very much) the extent to which they felt nostalgic about that particular item. As expected, adult participants (ages 18 to 50) did report feeling nostalgic about certain special locations such as "childhood places" (M = 3.2), "home" (m = 2.9) and "school" (M = 2.7), and non-spatial items received higher ratings of nostalgia, e.g., "someone you loved" (M = 3.9), "not having to worry" (M = 3.9), "family" (M = 3.6), "holidays" (M = 3.5), and "the way people were" (M = 3.3). These results not only suggest that people may feel nostalgia about things other than places, but also that the array of intentional objects toward which the cognitive states associated with our feeling of nostalgia can be directed is diverse.

Additional evidence in support of this variability comes from two recent studies conducted by Wildschut and collaborators¹⁸. In the first study, Wildschut et al. coded the content of forty-two autobiographical narratives from the magazine *Nostalgia*, submitted by their readers between 1998 and 1999. In the second study, the same coding strategy was applied to narratives requested from university undergraduates in an experimental setting. Their coding schema revealed seven overarching categories for intentional objects of nostalgia: persons (Study 1: 33%; Study 2: 28%), momentous events (21%; 34%), animals (17%; 1%), tangibles (12%; 1%), settings (10%; 19%), past selves (5%;

1%), and periods in life (2%; 16%). Evidently, people can feel nostalgic about things other than places. Further evidence about the multifarious nature of nostalgia's intentional objects comes from a recent cross-cultural study conducted by Hepper and colleagues¹⁹. In this study, 1,704 students from 18 countries were asked to rate how closely certain features relate to their notion of nostalgia based upon a previously normed set of characteristics²⁰. Importantly, among the features rated as central to participant's notion of nostalgia, some related to nostalgic events about things other than memories of specific past events such as social relationships, the past in general, memorabilia, and their own childhood or youth. Taken together, these results suggest not only that the mental states associated with the feeling of nostalgia can be memories about things other than specific past locations (e.g., food, aromas) but also that they need not be specific episodic autobiographical memories at all (e.g., one's youth, the past in general).

Given these results, it is odd that researchers keep insisting that nostalgia is always associated with a specific episodic autobiographical memory. The reason, I believe, has more to do with experimental methodology than with psychological reality. As it happens, nostalgia researchers usually distinguish between "personal" and "historical" nostalgia; the former tends to be studied by social psychologists, while the latter tends to be studied in marketing and advertising. As a result, most (if not all) experimental paradigms in the social psychology of nostalgia ask participants to think of specific episodic autobiographical memories that make them feel nostalgic. In contrast, marketing and advertising researchers tend to use historically dated external cues, such as "think of the TV shows in the 80s" or "90s movies", to elicit feelings of nostalgia which are then associated with some sort of consumer behavior (e.g., recorded TV

ratings). Unsurprisingly, however, there is much psychological overlap between the two experimental strategies. Some marketing studies, for instance, report that when cued with products or ads, participants cannot help but recall a precise episodic memory from their personal past about which they feel particularly nostalgic²¹. From the point of view of autobiographical memory research, this is not surprising, as external items can be powerful retrieval cues²². Conversely, it is often the case that when cued to remember a specific autobiographical event, participants cannot help but think of less precise spatiotemporal events (e.g., "elementary school" or "my old neighborhood").

More interesting still is the fact that often nostalgia may bring to mind time periods we did not directly experience. In Woody Allen's movie *Midnight in Paris*, the main character, Gil Pender, is constantly overwhelmed by nostalgic thoughts about Paris in the 1920s. However, set in contemporary times, Pender could not have lived during that time. At most, he could've imagined what it would have been for him to have lived in Paris in the 1920s. Yet, the feeling was nothing short of nostalgic. Indeed, although understudied, feeling nostalgia for a time one did not directly lived appears to be a common phenomenon. There are chat rooms, Facebook pages, and hundreds of websites dedicated to the exchange of personal experiences of nostalgia about periods of time other than those one directly experienced. In fact, a new word has been coined to capture this precise variant of nostalgia, *anemoia*, which both the *Urban Dictionary* and the *Dictionary of Obscure Sorrows* define as "nostalgia for a time you've never known".

If personal and historical nostalgia do not correspond to distinct cognitive processes, how can we make sense of the fact that people seem to experience nostalgia not only for events they directly experienced in their past, but also for events that they did

not personally experience as well as for generic time periods? Inspired by recent evidence from cognitive psychology and neuroscience, my suggestion is that the cognitive content of nostalgia is in fact a mental simulation, of which episodic autobiographical memories are only a subclass²³. As such, the cognitive component of a nostalgic mental state can have as its intentional object something other than a particular spatio-temporal event one directly experienced in the past. To support this claim, however, I need first to discuss some developments in the science of memory and mental simulation.

Historically, memory and imagination have been seen as entirely different systems²⁴. However, in the last three decades there have been a number of critical findings that have challenged that view. In 1985, psychologist Endel Tulving observed that amnesic patient K.C., in addition to being impaired at remembering his personal past, had trouble imagining possible personal future events. This led Tulving to suggest that remembering the past and imagining the future were two processes of a single system for mental time travel²⁵. Further support for this hypothesis came in the early 2000s, as a number of neuropsychological²⁶, developmental²⁷, behavioral²⁸, and neuroimaging²⁹ studies suggested that episodic memory and future thinking share common neural and cognitive mechanisms. Since then, the number of studies substantiating these observations have risen sharply³⁰, strengthening the view that remembering the past and imagining the future engage a common brain network, often called "the default network"³¹.

More recently, however, this view has been modified, as related results have indicated that the default network may underlie also other kinds of mental simulations which are not easily localizable as either being in one's personal past or in one's possible

future. For instance, Hassabis and colleagues³² showed that patients with hippocampal amnesia—a critical region of the default network—had tremendous difficulty imagining possible new experiences in response to verbal cues (e.g., "Imagine you're lying on a white sandy beach in a beautiful tropical bay"³³). However, such imagined new experiences need not have been mentally placed in a possible future. Presumably, to imagine a new experience is to entertain a mental simulation of a possible event that, even though it hasn't happened yet, could nonetheless occur in the future—but not necessarily. To imagine a new experience may just mean to think of a possible hypothetical situation that may occur in one's life regardless of its precise temporal location³⁴.

More recent neuroimaging evidence is consistent with the observation that the default network is engaged in mental simulations of events that are neither from one's personal past nor one's possible future. Addis and colleagues³⁵, for instance, found very similar patterns of brain activation within the default network when participants were instructed to simulate either a possible future or a possible but not actualized past. Similarly, De Brigard et al³⁶ asked participants to engage in episodic counterfactual thinking—i.e., thoughts about alternative ways past personal events could have occurred but did not³⁷—while undergoing fMRI. Consistent with Addis et al.'s³⁸ result, they found engagement of the default network not only when participants were remembering their past but also when they were engaged in episodic counterfactual thinking³⁹. Default network activation has also been reported during non-temporal simulations⁴⁰, atemporal routine activities⁴¹, mind-wandering⁴², spatial navigation⁴³, mentalizing⁴⁴, narrative comprehension⁴⁵, and counterfactual thoughts about other people⁴⁶. Although it is still

possible that all these different tasks involve placing the simulated mental content at a particular time, there is no prima facie reason to believe that a temporal component is common to all of them.

As a result, instead of thinking about the default brain network as underlying the cognitive mechanisms of a mental time travel system, researchers are trying to move away from this view by identifying non-temporal features shared by the sorts of mental simulations supported by the default network. An influential recent proposal suggests that the default network supports mental simulations that are self-generated, self-referential, incorporate episodic information, and have some social significance for the subject 47 . A second, complimentary proposal adds to these elements the fact that default brain network supported simulations tend to be dynamic; that is, they unfold in time as opposed to more static representations, as when one quickly visualizes an object or a word⁴⁸. The view that has emerged, then, is that episodic autobiographical memories are a sub-class of default-network-supported self-relevant, socially significant, episodic dynamic mental simulations. But, of course, they are not the only ones, as many episodic counterfactual, atemporal, and future simulations are too. And my suggestion is that the kinds of nonautobiographical cognitive contents associated with nostalgic states are instances of this broader category of mental simulation.

If this suggestion is on the right track, then we can readily explain why people tend to feel nostalgia for intentional objects other than specific past autobiographical events. The reason, I surmise, is because the cognitive contents associated with their nostalgic mental events are the kinds of mental simulations supported by the default network—which include, but are not limited to, episodic autobiographical memories. As

a result, nostalgia can be associated with mental simulations featuring a possible past one did not experience (e.g., an episodic counterfactual simulation), a concurrent non-actualized present, or even idealized pasts one could not have lived but nevertheless can easily imagine by piecing together memorial information to form richly detailed episodic mental simulations (e.g., as in the case of *Midnight in Paris*). Finally, broadening up the cognitive contents of nostalgia from autobiographical memories to the larger class of episodic dynamic mental simulations just discussed, also helps to explain the fact that nostalgia is normally associated with personally meaningful and socially relevant events⁴⁹ since, as mentioned, episodic mental simulations supported by the default network tend to be egocentric and socially-relevant in nature⁵⁰.

2.2. The affective component of nostalgia

Some emotions are positive, some are negative, and some are in between. This dimension of variance is normally called "valence". Negatively valenced emotions include fear and sadness, while positive emotions include happiness and joy. According to the traditional view, nostalgia is seen as a negative emotion, akin in valence to that of sadness. As mentioned above, the main motivation for this claim came from medical reports describing homesick patients as profoundly sad, melancholic, and lethargic—all of which tend to be associated with negative emotional valences. The psychoanalytic tradition continued this view and characterized nostalgia as necessarily involving sadness and pain. Both Neumann⁵¹ and Peters⁵², for instance, argue that the essential characteristic of nostalgia is a painful and acute yearning for a past forever lost. As such, even as late as the 1980s, nostalgia is taken to be as a supremely negatively valenced

emotion, analogous to depression, which explains why the psychoanalytic tradition catalogued it as a particularly sad version of melancholia.

However, despite this apparent general agreement, some dissident voices expressed a different view: namely, that there is something enjoyable about the act of nostalgic reminiscence. One of the first dissident voices was Charles Darwin. In The Expression of the Emotion in Man and Animals⁵³ he mentions that some feelings "which are called tender and difficult to analyse" involve both pleasure and joy but also tend to bring tears to our eyes, and includes as an example Ulysses' vivid recollection of his home. Almost 100 years later, and breaking with the psychoanalytic tradition. Kleiner⁵⁴ suggested a distinction between homesickness and nostalgia, on the grounds that the latter involves "a peculiar combination of sadness and pleasant reminiscing"⁵⁵. Following suit, Kaplan⁵⁶ proposed a distinction between depressive and non-depressive nostalgia, on the grounds that non-depressive nostalgia involves both a pleasurable and a painful aspect to it. Indeed, he suggested that it is the *abnormal* case of nostalgia that manifests with depressive symptoms, due to the fact that its pleasurable aspect is missing. By now, it is not that unusual for theorists of emotion to think of nostalgia as "bittersweet"; that is, as involving both positive and negative valences. In fact, some philosophers have even used nostalgia as a paradigmatic case of mixed-valenced emotion⁵⁷.

More recently, the claim that nostalgia is mixed-valenced has also received substantial empirical support. In the Wildschut et al⁵⁸ study discussed above, participants associated both positive and negative emotions as being essential to their conceptions of nostalgia. These two emotional components were also evident in the cross-cultural study conducted by Hepper and colleagues⁵⁹. They report, for instance, that across 18 different

cultures, people not only normally associate "sadness", "loneliness" and "regret" to the feeling of nostalgia but also "comfort/warmth", "happiness", and "fond memories", which further suggests that the ordinary notion of nostalgia is associated with both negative and positive valences.

However, the mixed-valenced character of nostalgia goes beyond our ordinary notion. In an attempt to clarify whether or not nostalgia generates negative emotions, as the traditional view had it, Wildschut et al⁶⁰ asked participants to either bring to mind a memory that makes them feel nostalgic or one that does not elicit any emotion at all. Immediately after, participants received a Positive and Negative Affect Schedule or PANAS questionnaire, a well-validated instrument to measure state affect⁶¹. Contrary to what the traditional view predicts, they found no increase in negative affect. A follow-up cross-cultural study by Zhou and colleagues⁶² replicated this finding with samples from three different nations. Moreover, there is some evidence to the effect that engaging in nostalgia may actually bring about positive feelings. In a recent study, Cheung and collaborators⁶³ asked participants to list a number of songs that normally elicit feelings on nostalgia in them. A month later, participants came back to the lab for what they thought was an unrelated task. In it, participants were asked to rate the quality of some songs and to answer a few questions afterward-including questions about emotional valence. Half of the songs they listen had been included in their list of nostalgic songs, while the other half were known by the participants but not listed as nostalgia inducing. Cheung et al⁶⁴ found that, relative to the non-nostalgic songs, those listed as nostalgia producing tended to elicit more positive ratings of valence, suggesting that, contrary to the traditional view, engaging in nostalgia may actually bring about positive feelings.

But what about all these negatively valenced symptoms-the sadness, the depression—associated with nostalgia? Aren't they also effects of nostalgia? As it turns out, it looks as though old physicians got the order of causation backwards: nostalgia does not cause negative affect, but rather it is *caused* by negative affect⁶⁵. Wildschut et al⁶⁶, for instance, found out that when people are asked under which conditions they are more likely to feel nostalgia, they tended to list negative emotional conditions such as feeling that things aren't going well, loneliness, or depression. Moreover, in a direct manipulation, Wildschut and colleagues manipulated negative moods between participants by having them read either a sad or a neutral story prior to asking them whether or not they felt nostalgic immediately afterward. Participants who were negatively primed were more likely to report feeling nostalgic than those who only read the neutral story. Consistent results have been found with other negative triggers, including loneliness⁶⁷, loss of social connections⁶⁸, sense of meaninglessness⁶⁹, boredom⁷⁰, and cold temperatures⁷¹. Taken together, the results of these studies strongly suggest that nostalgia is triggered either by thoughts or external conditions that bring about negatively valenced emotions. Certainly these are not the only triggers, as Wildschut et al⁷² remind us, but they do represent a significant subset.

The question now is how can we make sense of nostalgia as involving both a negative and a positive valence at the same time? I believe that this fact becomes less surprising when we understand nostalgia in the context of mental simulation. Oftentimes, when we entertain the kinds of mental simulations described in section 2.1., we may go back and forth between the current act of simulating and the content that is simulated. Both the simulating and the simulated elicit emotions, and they need not be the same.

Consider another paradigmatic dynamic mental simulation of the kind discussed above: episodic counterfactual thinking⁷³. Oftentimes, we mentally simulate better counterfactual alternatives to past events that ended in bad outcomes-e.g., "If only I had arrived earlier, I would have gotten tickets for the show". These "upward counterfactuals" typically elicit feelings of regret, a paradigmatically negative valenced emotion⁷⁴. However, as Markman and McMullen⁷⁵ demonstrated, if one mentally switches attention from the emotion felt while simulating the counterfactual to the emotion one feels when only attending to the simulated content, regret can turn into contentment. Conversely, one can imagine an alternative bad outcome to what in reality was a positive one—e.g., "had I missed that penalty kick, we would have lost the game". Normally, these "downward counterfactuals" elicit feelings of relief, a paradigmatically positively valenced emotion. However, research has shown that focusing one's attention only to the content of the counterfactual simulation without regard to the actual situation in which one is doing the simulating, negatively valenced emotions ensue. Understanding the discrepancy between the emotion felt when attention is paid to the act of simulating versus when attention is paid to the content of the simulation, is an area of active research in the psychology of counterfactual thinking 76 .

My suggestion is that this sort of discrepancy may be the reason behind the perceived "bitter-sweetness" of nostalgia. As we have seen, nostalgia is often triggered by conditions in which people normally experience negative emotions such as loneliness, rejection, and even cold temperatures. As such, the nostalgic mood—that is, the emotional context one is in when entertaining the mental simulation whose cognitive content one feels nostalgic about—is negative. However, the content of the simulation

itself is normally positive. As we discuss, one can feel nostalgia about a happy childhood moment, a possible event involving a long gone loved one, or even a historically impossible yet psychologically vivid anemoia of having a cup of coffee in Paris in the 1920s. And when we focus our attention in the content of the simulation, without regard to the emotional context of the simulating, we feel joy, pleasure, and even happiness. The back and forth of our attention between the context of the simulating and the content of the simulation gives rise to the bittersweetness or mixed-valenced nature of nostalgia.

2.3. The conative component of nostalgia

The last component of the traditional view is the conative component, as nostalgia, it is said, involves a desire to go back to one's motherland. Despite the centrality of this aspect of nostalgia—*nostos* (desire, longing) is, after all, half of its name—it is seldom discussed, much less studied. For the purpose of our current philosophical exploration, there are two issues worth delving into. The first issue has to do with the precise object of this desire, i.e., that which the desire is about. The second issue pertains the precise nature of the desire. Philosophers often think of desire as naming a somewhat disjointed group of mental states, including wanting, wishing, craving, and preferring—states that are often referred to as pro-attitudes. Philosophical theories of desire also disagree as to whether the essence of desire is some kind of disposition to act, a certain kind of pleasure brought about by the satisfaction of the desire, or its anticipation. Thus, understanding both the object of the nostalgic desire and the particular kind of pro-attitude it consists of, would prove critical to complete our characterization of the notion of nostalgia.

Let's start with the intentional object of the nostalgic desire. According to the traditional view, the intentional object of the nostalgic desire coincides with the intentional object of its cognitive content⁷⁷. That is, given that the feeling of nostalgia is associated with the cognitive state of autobiographical recollection of one's motherland, the nostalgic desire is directed toward one's motherland. But what are the conditions of satisfaction of this desire? Here, the few theorists that have discussed this aspect of nostalgia, disagree. In his classic work on homesickness, Rumke⁷⁸ distinguishes "true nostalgia" from "pseudo-nostalgia", in that only the former involves "yearning for the surroundings in which one was bred"⁷⁹. This view suggests that what the nostalgic individual desires is to go back to the place she grew up in. Martin echoes that sentiment, but with a twist, as he argues that nostalgia essentially involves "a biological inclination to return to the past, to our beginnings, to childhood $[\dots]^{n80}$. Although related, the views are different in an important sense. On the one hand, for Rumke, the object of desire is an atemporal location. What the nostalgic individual longs for is, like Ulysses, to go back to its motherland at the present time. It is the physical impossibility to do what brings about the negative affect. Conversely, for Martin, the object of the nostalgic desire is essentially temporal: what the nostalgic individual wishes for is either to return back in time or to bring back a past time to the current time. On this view, the metaphysical impossibility to achieve this time travel brings about the pain—the *algos*.

Given the previous discussion on the cognitive component of nostalgia, we can already see difficulties with the traditional account of the intentional object of the nostalgic desire. For one, as mentioned above, one can feel nostalgic about things other than one's motherland, or even one's personal past. Possible intentional objects of

nostalgia include particular objects, relationships, life periods, and even idealized eras one might not have lived in. Indeed, I wouldn't be surprised if people were to experience nostalgia—*anemoia*, we may say—for a possible future, as when people wish they could travel forward in time to experience some idealized futuristic, or perhaps apocalyptic, scenario. The account proposed here wouldn't rule out this possibility. A second difficulty pertains to Rumke's atemporal view, for it can be the case that a person feels nostalgic for her homeland and, upon return, finds that her longing isn't satisfied. As an illustration, consider an excerpt from García Márquez's *Love in the Time of Cholera* describing the feeling of Juvenal Urbino, a young doctor who finds himself in Paris, reminiscing the odors, and the sounds, and the open terraces of his Caribbean homeland, and wishing every second that he could go back.

He was still too young to know that the heart's memory eliminates the bad and magnifies the good, and that thanks to this artifice we manage to endure the burden of the past. But when he stood at the railing of the ship and saw the white promontory of the colonial district again, the motionless buzzards on the roofs, the washing of the poor hung out to dry on the balconies, only then did he understand to what extent he had been an easy victim to the charitable deceptions of nostalgia. (Garcia, 1988, p. 105-6)

Upon his return, Juvenal feels disappointed, tricked, as it were, by the rosy colors of an idealized nostalgic past. This difficulty is nostalgia's incarnation of a well-known Platonic paradox first described in the *Gorgias*: a person can desire that p is the case, and yet, upon p being the case, the desire isn't satisfied. Plato's suggestion is that, in such

cases, the desirer may just don't know what the object of her desire is—an intriguingly paradoxical solution I will return to below.

Finally, a third difficulty with the traditional view pertains to Martin's temporal account. Notice that, as stated, his view allows for two possible readings. According to the reading favored by the traditional view, what the nostalgic individual desires is for her current self to travel back in time to a place or situation in which things were better than they are currently for her. The pain surges as a result of her realization of the impossibility of traveling back in time. Notice, incidentally, that this reading usually implies that the current self is somehow preserved—although it may be possible (albeit uncommon) that one may also desire not having grown up to be what one currently is, thus going back to one's past also includes returning to a previous self. Nevertheless, there is a second, possible reading consistent with the temporal view. According to this reading, what the nostalgic subject desires is for the past situation to be brought to the present; that is, she does not wish to travel back in time to a past situation, but rather that the past situation were somehow to become or replace the current one. On this second reading, the intentional object that could satisfy the nostalgic desire would not be found in the past, but in the present. And what brings about the pain is not the metaphysical impossibility of traveling back in time, but the difficulty of re-creating the past in the present.

Unlike the traditional view, this second reading—which, following Nawas and Platt⁸¹, can be called *present-oriented approach* (as opposed to *past-oriented approach*)—was championed by Zwingmann⁸² in his medical analysis of "Heimweh" or "nostalgic reaction". According to him, the feeling of nostalgia comes as a result of

desiring a re-instatement of "those features of [the] past [...] which are perceived as having (had) the greatest gratification value³⁸³. What the subject wants is for those features from past experiences she perceives as having produced gratification, to be reinstated in the present, presumably because her current situation lacks them. Indeed, this insight inspired the psychoanalytic and psychiatric community to distinguish the causes, objects, and conditions of satisfactions of nostalgic desires. From this perspective, then, an individual can be in a nostalgic state caused by childhood absences, manifested by a bittersweet feeling associated with a cognitive state whose intentional object is a particular memory of interacting with her mother. Yet the associated desire is to be satisfied not by traveling back in time to her mother's side, but rather by improving her current relationships. This approach not only has the advantage of making the conditions of satisfaction of the nostalgic desire medically and metaphysically more tractable, but also helps to understand nostalgia's particular incarnation of the Gorgias' paradox: the nostalgic individual wrongly attributes the desirable features of the intentional object to a past unrecoverable event, when in reality those features can be dissociated from the intentional object and re-attached to a current condition. In fact, extending upon this view, Nawas and Platt⁸⁴ suggest that nostalgia's conative component may actually be future-oriented: the nostalgic desire is actually motivational.

Thinking of nostalgia's conative component as motivational allows us to approach the second issue discussed above, viz. what kind of pro-attitude nostalgia's conative component may be. And the suggestion I would like to put forth—following Zwingmann's⁸⁵ insight, and Nawas and Platt's⁸⁶ theoretical proposal—is that nostalgia is in fact motivational. Thankfully, I am not alone in this claim. In the past few years,

Sedikides, Wildschut and others⁸⁷ have conducted a number of experiments suggesting of a strong link between motivation and nostalgia. In one such study, Stephan and colleagues⁸⁸ asked participants to either engage in a nostalgia induction condition or not (control). After the induction, participants who experienced nostalgia were not only more likely to give higher ratings to approach-motivation questionnaires but also more likely to interact with others and to engage in pro-social behavior. Related studies have uncovered a number results suggesting future-oriented outcomes following nostalgic induction such as increased optimism, inspiration, creativity, and other kinds of pro-social behaviors⁸⁹. Although these results are new and rather preliminary, they are at least indicative that engaging in nostalgia seems to boost motivation.

But what drives this motivational pro-attitude when one entertains a nostalgic desire? Once again, the answer to this question may come from considering nostalgia's cognitive content as a mental simulation. Multiple lines of evidence suggest that when we engage in mental simulation we redeploy much of the same neural mechanisms we would have employed had we actually engaged in the simulated action. Thus, mental simulations that depict engaging in motor-based based actions tend to also engage both the supplementary motor area as well as the premotor cortex⁹⁰. Likewise, mental simulations that involve richly perceptual contents tend to engage the relevant sensory cortices, while simulations that are more abstract or conceptual are more likely to engage temporal-lateral cortices, normally associated with semantic memory⁹¹. Notice that this occurs for autobiographical memories but also for other kinds of default-network supported simulations, such as episodic future and counterfactual thoughts⁹². As a result, some contemporary views suggest that engaging in certain kinds of simulations is a way

of economically substituting an experience for a cognitively close replacement—an ersatz experience, as it were. The idea of thinking of mental simulations as substitutes for experiences has recently been championed by Kappes and Morewedge⁹³, who carefully review evidence suggesting that mentally simulating an experience or event tend to evoke parallel neural, cognitive, and behavioral effects as engaging in the corresponding actual experience or event.

In section 2.2, I argued that attending to the content of the nostalgia producing mental simulation elicits a positively valenced emotion-which is then contrasted with the current state, once attention is reverted back to the conditions under which one is simulating. My proposal here is that what underlies this positively valenced emotion is some kind of pleasurable or reward signal the subject momentarily experiences when attention is allocated to the simulated content. As it turns out, this is exactly what the results of Oba and collaborators⁹⁴ suggest. In this neuroimaging study, Oba et al. asked participants to recollect emotional autobiographical memories that either elicit or did not elicit nostalgia. Both of these simulations are default-network based, and both are emotional. However, if the account I am advocating here is correct, only the nostalgic but not the non-nostalgic emotional memories should engage the reward system. Graciously, this is exactly what they found. Using a region-of-interest analysis, Oba and colleagues identified increased activation in the substantia nigra/ventral tegmental (SN/VTA) area and the ventral striatum when compared with emotional but non-nostalgic autobiographical memories. Critically, both the SN/VTA as well as the striatum are regions paradigmatically associated with reward and motivation-the former with reward-seeking and anticipation, the latter with rewarding outcomes. This result strongly

suggests that engaging in nostalgia producing mental simulations produces a reward signal, which in turn may underlie the motivational behavior discussed above. More precisely, entertaining the kinds of mental simulations that elicit the bittersweet feeling of nostalgia generate a reward signal that motivates the individual to act so as to turn the ersatz experience into a real one, in an attempt to replace the simulated positive emotion with the negative emotion felt during the simulating.

3. Final thoughts: Nostalgia, mental simulation, and political motivation

In the current paper, I put forth a view according to which nostalgia is a complex mental state constituted by three intertwined components: a cognitive, an affective, and a conative component. Contrary to the traditional approach, the view I defend here suggests, first, that the cognitive component need not be a memory but rather the kind of mental simulation of which episodic autobiographical memories are but a case. Second, contrary to the traditional view, nostalgia is affectively mixed-valenced, and this emotional bittersweetness results from the juxtaposition of the affect during the act of simulating—which is typically negative—with the affect elicited by contemplating the simulated content, which is typically positive.⁹⁵ Finally, contra the traditional view, I argued that the conative component is not a desire to go back to the past, but rather a motivation to re-instate in the present the properties of the simulated content that, once we turn our attention to it, makes us feel good.

I wish now to conclude with a brief speculation on a topic of contemporary importance. In the last couple of years, we have seen a resurgence of nationalistic political movements who have gained traction by way of promoting a return to the "good old days", with slogans such as "make America great again", in the US, and "we want

our country back", in the UK. This Politics of Nostalgia, as many have call such phenomenon⁹⁶, promote the implementation of politics that, allegedly, would return nations to times in which people were better off. Unsurprisingly, as Marx had predicted it⁹⁷, the politics of nostalgia are usually heralded by conservative groups who, in the past, had tended to be better off than they currently are. Interestingly, this seems to be independent of the particular politics of the time. In a recent study conducted by Prusik and Lewicka⁹⁸, a large sample of Poles were asked nostalgia-related questions about how things were in Poland prior to the fall of communism, which occurred 25 years ago. Their results clearly revealed that people felt much more nostalgic and had more positive feelings about the communist government if they were better off then than they are now, if they were older, and if they were currently unhappy. Doubtlessly, older, conservatively leaning folk who perceive their past—whether accurately or not—as being better than their current condition, account for a significant portion of the electorate supporting this nationalistic movement. But we would be misled by thinking that they are the primary engine, let alone the majority. For the results show a very different reality: a large number of younger individuals, avidly supporting nostalgic policies that would return their nations to a past they never lived.

The psychological underpinnings of this phenomena would be hard to explain under the traditional view of nostalgia. If they have not experienced such a past, how can people feel nostalgic about it? Under the view proposed here, however, an explanation is readily available. For the politics of nostalgia do not capitalize on people's memories of particular events they may have experienced in their past. Instead, it makes use of propaganda and all sorts of biased and misleading statements about the way things were,

in order to provide people with the right episodic materials to conjure up mental simulations of possible scenarios that most likely never happened. These very same propagandistic strategies help to convince people that their current situation is worse than it actually is, so that when the simulated content—which, when attended, brings about positive emotions—is juxtaposed to negatively valenced thoughts about their present status, a motivation to eliminate this emotional mismatch ensues, and with it an inclination to political action. Thus, the politics of nostalgia have less to do with memories about a rosy past, and more with propaganda and misinformation. This suggests that, paradoxically, the best way to counteract it may be to improve our knowledge of the past. Nostalgia could be a powerful political motivator, for better or for worse. Improving our memory may be the best strategy to curb the uncharitable deceptions of nostalgia.

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