CHAPTER 12

From Self-Discontinuity to Meaning through Nostalgia

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In his pioneering book *Yearning for Yesterday: A Sociology of Nostalgia*, Fred Davis (1979) suggested that nostalgia serves to temporally connect disjointed self-aspects: "Nostalgia helps the individual construct continuity of identity by encouraging an appreciative stance toward former selves; excluding unpleasant memories; reinterpreting 'marginal, fugitive, and eccentric facets of earlier selves' in a positive light; and establishing benchmarks in one's biography" (pp. 35–36). The prescient sociologist also suggested that when these temporally disjointed self-aspects become salient or accessible, the individual experiences "fears, discontents, anxieties, or uncertainties" (p. 34). In that case, nostalgia comes to the rescue by restoring the temporal bond among self-aspects: "It is these emotions and cognitive states that pose the threat of identity discontinuity . . . that nostalgia seeks, by marshalling our psychological resources for continuity, to abort or, at the very least, deflect" (pp. 34–35). Davis, then, seemed to opine that self-discontinuity triggers nostalgia, which in turn increases self-continuity. We will elaborate on this idea, adding that self-continuity subsequently raises meaning in life (henceforth, *meaning*). We will envelop our proposal within a conceptual framework, the regulatory model of nostalgia.

DEFINITIONS

We will proceed to define and embellish the relevant concepts: self-discontinuity, self-continuity, nostalgia, and meaning.

Self-Discontinuity and Self-Continuity

Self-discontinuity is the subjective experience of disjuncture between one's past and present selves (Sedikides, Wildschut, Gaertner, Routledge, & Arndt, 2008; Sedikides, Wildschut, Routledge, & Arndt, 2015). Self-discontinuity involves identity confusion and discomfort because one's life patterns or sources of meaning are disrupted (Jiang, Cheng, Wang, & Hou, 2021; Sedikides, Hong, & Wildschut, 2023). More generally, self-discontinuity is a marker of psychological ill-being or psychological illness, including distress (Anderzén & Arnetz, 1999; Habermas & Köber, 2015), loneliness (Zhang, Zhang, & Gao, 2022), ineffective coping (Sadeh & Karniol, 2012), depression, anxiety, schizophrenia, and suicidal ideation (Chandler & Proulx, 2008; Sokol & Eisenheim, 2016; Sokol & Serper, 2019).

Conversely, self-continuity is the subjective experience of connectedness between one's past and present selves (Sedikides et al., 2016). Self-continuity synthesizes one's experiential stream and consolidates one's identity (i.e., feeling like the same person across time; Sedikides et al., 2023), contributing to self-concept clarity (Jiang, Chen, & Sedikides, 2020). Also, self-continuity is associated with psychological adjustment, well-being, and equanimity (Landau, Greenberg, & Solomon, 2008; McAdams, Reynolds, Lewis, Patten, & Bowman, 2001), as well as physical health (Anderzén & Arnetz, 1999).

Nostalgia

According to *The New Oxford Dictionary of English* (Pearsall, 1998, p. 1266), the emotion of nostalgia is "a sentimental longing or wistful affection for the past." Prototype approaches, which explore laypersons' understanding of the construct "nostalgia," concur with the dictionary definition. Laypersons, across cultures, regard nostalgia as bittersweet ("a joy tinged with sadness"; Werman, 1977, p. 393) but predominantly positive, involving contentment, calmness, and warmth, but also yearning for one's past (Hepper, Ritchie, Sedikides, & Wildschut, 2012; Hepper et al. 2014). Also, experimental inductions of nostalgia engender more positive affect than negative affect (Leunissen et al., 2021).

The past to which nostalgia refers is personally valued and meaningful (Sedikides & Wildschut, 2018). It often pertains to momentous occasions with close others (e.g., family members, partners, friends), such as birthday celebrations, graduations, and summer vacations (Wildschut, Sedikides, Arndt, & Routledge, 2006). Nostalgia occurs frequently (i.e., several times a week; Wildschut et al., 2006) and across cultures (Sedikides & Wildschut, 2022) and ages (Hepper, Wildschut, Sedikides, Robertson, & Routledge, 2021).

Meaning

Meaning is the subjective experience that one's life is purposeful or goal oriented, is coherent or comprehensible, and is significant or existentially matters (King & Hicks, 2021). These three components are, respectively, motivational, cognitive, and evaluative (Reker & Wong, 1988). Significance or existentially mattering might be the most critical ingredient of meaning (Costin & Vignoles, 2020). Nevertheless, we take an inclusive approach, focusing on the presence of meaning in one's life (Steger, Frazier, Oishi, & Kaler, 2006).

People seek meaning or engage in meaning making (Frankl, 1946/1984). In turn, meaning is characterized by key correlates or outcomes. Specifically, it is associated with, or predicts, psychological health, psychological functioning (e.g., coping, optimism), and physical health (Czekierda, Banik, Park, & Luszczynska, 2017; Hooker, Masters, & Park, 2018).

THE REGULATORY MODEL OF NOSTALGIA

Nostalgia has coping potential. This potential is explicated by the regulatory model (Wildschut & Sedikides, 2023a, 2023b). In its general form, the model posits that a life event might provoke a certain unsettling psychological state, such as a sense of rapture or self-discontinuity, but it will also trigger nostalgia. The individual will move beyond the here and now and connect with distal events in their life in an attempt to self-regulate (Trope et al., 2021). In turn, nostalgia will assuage that psychological state, such as by reducing self-discontinuity or increasing self-continuity. The emotion of nostalgia, then, constitutes a psychological resource, a balancing feedback mechanism that maintains homeostasis. We will use the regulatory model of nostalgia mainly as a framework to discuss the rather fragmented empirical literature on the links among self-discontinuity, nostalgia, and self-continuity. We will also consider meaning as a correlate and consequence of self-continuity.

Self-Discontinuity Is Associated with, or Triggers, Nostalgia

The first tenet of the regulatory model implies that self-discontinuity is related to, or elicits, nostalgia. Qualitative evidence (i.e., content-analyzed interviews, participant observation) is consistent with this tenet. Faculty members in Turkey (Brown & Humphreys, 2002) and Finland (Ylijoki, 2005) confronted with changes in higher education resorted to nostalgia, as did medical practitioners in the United Kingdom (McDonald, Waring, & Harrison, 2006) facing organizational

change. Similarly, U.S. community members relied on nostalgia to cope with news of the closure of a community hub (i.e., coffeeshop; Milligan, 2003).

Correlational evidence is likewise generally consistent with this tenet of the regulatory model (Best & Nelson, 1985). In four surveys of U.S. nationals (conducted in 1968, 1974, 1976, and 1980), respondents who were experiencing self-discontinuity rather than self-continuity rated their past more positively on four items (e.g., "People had it better in the old days"; "In spite of what some people say, the lot of the average man is getting worse, not better"); arguably, favorable perceptions of the past under these circumstances constitute an indirect index of nostalgia. However, out of four indices assessing self-discontinuity (i.e., occupational mobility; geographic mobility; work interruption; deteriorating life circumstances, such as divorce and health problems), this pattern emerged for the last index only. Furthermore, in a cross-sectional study (Sedikides, Wildschut, Routledge, & Arndt, 2015, Study 1), British community members reported their level of self-discontinuity due to both unfavorable life events (e.g., "change in financial situation," "death of a close family member") and favorable life events (e.g., "gaining a new family member," "outstanding personal achievement"; Social Readjustment Rating Scale [Holmes & Rahe, 1967]) occurring in the prior 2 years. Those who experienced self-discontinuity due to unfavorable (but not favorable) events expressed higher nostalgia, measured with the 5-item Southampton Nostalgia Scale (Routledge, Arndt, Sedikides, & Wildschut, 2008), which refers to the experiential frequency (e.g., "How often do you experience nostalgia?") and subjective importance (e.g., "How important is it for you to bring to mind nostalgic experiences?") of the emotion. Additional correlational evidence stems from research on addiction. U.S. (MTurkers) disordered gamblers and drinkers indicated their level of self-discontinuity (i.e., "Gambling has changed who I am"; "The person I was before I started gambling is different from the person I am now"). Self-discontinuity was positively related to nostalgia for the pre-addicted self (Kim & Wohl, 2015). Here, nostalgia was measured with three items ("I sometimes feel nostalgic for the life I had before I started gambling"; "I never miss the life I had before I started gambling" [reverse coded]; "I sometimes long for the life I had before gambling") adapted from Iyer and Jetten (2011).

A longitudinal study also provided support for the first tenet of the regulatory model (Wang et al., 2024). For each of their 4 years at university, Chinese undergraduates indicated their level of self-discontinuity and nostalgia. Self-discontinuity was assessed in terms of the presence of life events ranging in unfavorability (Adolescent Self-Rating Life Events Checklist; Liu, Liu, Yang, & Zhao, 1997). Examples are as follows:

"Being fined," "Conflict with friends or classmates," "Failure in a test," "Unable to be with family," and "Get sick seriously." Nostalgia was assessed with the 5-item Southampton Nostalgia Scale (Routledge et al., 2008). Initial self-discontinuity that accompanied transition to university life predicted higher nostalgia, although the strength of this relation weakened in subsequent years.

More importantly, experimental evidence is consistent with the tenet (Sedikides, Wildschut, Routledge, & Arndt, 2015, Study 2). British undergraduates were randomly assigned to three conditions: negative self-discontinuity, positive self-discontinuity, and self-continuity control. In the negative self-discontinuity condition, they read an essay arguing that the university years break off students from family and friends, prompting students to question their self-beliefs, goals, and values. In the positive self-discontinuity condition, they read an essay arguing that the university years are a time of personal transformation during which students become more independent; explore new opportunities; and consolidate their self-beliefs, goals, and values. Lastly, in the self-continuity control condition, they read an essay arguing that the university years strengthen and specify their role as a student surrounded by a steady group of friends in a familiar setting. Negative self-discontinuity (compared with the other two conditions) increased nostalgia, as assessed with the Nostalgia Inventory (Batcho, 1995). The Nostalgia Inventory includes 18 items that refer to persons or objects from one's past (e.g., "my family," "my friends," "TV shows and movies," "my childhood toys"). Finally, an experiment in the context of addiction supported the tenet (Wohl, Kim, Salmon, Santesso, Wildschut, & Sedikides, 2018). Disordered gamblers (Experiment 1) and drinkers (Experiment 2), all U.S. MTurkers, were informed that addiction leads to loss of self through changes in personality, moods, or behavior (self-discontinuity condition) or does not lead to loss of self (control condition). Self-discontinuity increased nostalgia for the pre-addicted self, with nostalgia being measured as in Kim and Wohl (2015).

Nostalgia Is Associated with, or Increases, Self-Continuity

The second tenet of the regulatory model states that nostalgia is related to, or augments, continuity. We review correlational and experimental evidence for this tenet.

Content Analyses and Correlational Evidence

Content analyses suggest that nostalgia bridges one's past with one's present (Stephan, Sedikides, & Wildschut, 2012). Nostalgia was

experimentally manipulated among British undergraduates with the event reflection task (ERT; Sedikides, Wildschut, Routledge, Arndt, et al., 2015; Wildschut & Sedikides, 2024). This is the most frequently used nostalgia induction technique (Fetterman et al., 2024). It entails vivid autobiographical recall, a particularly effective method to elicit emotions where high personal relevance is central to the affective experience (Joseph et al., 2020). As part of the ERT, participants in the nostalgia condition visualize a nostalgic event from their past, whereas participants in the control condition visualize an ordinary (e.g., everyday, regular) event from their past. Next, all participants list a few keywords that capture the gist of the corresponding event, then proceed to narrate the event in writing. A manipulation check (e.g., "I feel nostalgic at the moment") follows. The ensuing narratives were coded (Stephan et al., 2012) for abstractness/concreteness based on the Linguistic Inquiry and Word Count (Pennebaker, Booth, & Francis, 2007) and the linguistic category model (Coenen, Hedebouw, & Semin, 2006). Nostalgic (vs. ordinary) narratives contained more abstract terms and more concrete terms. Interestingly, the concrete terms buttressed the relevance of the nostalgic event for the nostalgizer's present. For instance, concrete terms highlighted a behavior or psychological state in the present ("I smile . . . ") that was prompted by a past event (" . . . when I look at my family photo on my desk"). Another content analysis of event memories written by individuals living with dementia revealed that nostalgic (relative to control) events contained more expressions of self-continuity (Ismail et al., 2022). Furthermore, a content analysis of memoirs suggested that nostalgia strengthened self-continuity among Ukrainian resistance fighters during World War II (Batcho, 2021). Lastly, a content analysis of participants' research journals (i.e., experimenter-guided recording of personal experiences) indicated that nostalgic memories tethered to olfaction (i.e., the aroma of various objects) were associated with self-continuity (Waskul, Vannini, & Wilson, 2009).

Additional research provides support for a link between nostalgia and self-continuity. U.S. sports fans watched a 30-second video clip evoking nostalgia for their team and completed the 4-item Self-Continuity Index ("I feel . . . ": "connected with my past," "connected with who I was in the past," "there is continuity in my life," "important aspects of my personality remain the same across time"). Nostalgia was positively associated with self-continuity (Chang, Schneider, Connaughton, Hager, & Ju, 2019). Malaysian community members who were dispositionally nostalgic (with nostalgia assessed with the 7-item Southampton Nostalgia Scale; Sedikides, Wildschut, Routledge, Arndt, et al., 2015) reported higher levels of self-continuity (assessed with the 4-item Self-Continuity Index; Loh, Gaur, & Lim, 2019).

Nostalgia can also serve as a linchpin that connects repatriates' experiences across cultures (Zou, Wildschut, Cable, & Sedikides, 2018). In a large sample of repatriates from 41 countries, nostalgia for the host culture (controlling for nostalgia for the home culture) was associated with higher self-continuity. Host nostalgia, then, facilitated the integration of experiences across varying cultural contexts.

The relevant literature has broadened the construct of self-continuity and measured it accordingly. Self-continuity was conceptualized as the subjective experience of connection among one's past, present, and future selves (Becker et al., 2018), a construct termed *global self-continuity* (Sedikides et al., 2023). It was measured as follows. Participants listed identities that best represented who they were, then rated whether they considered each identity as continuous ("To what extent does [each identity] make you feel that your past, present, and future are connected?"). The average score across the listed identities represented global self-continuity. In relevant research, nostalgia was positively associated with global self-continuity among Canadian undergraduates (Hong, Sedikides, & Wildschut, 2021, Study 1), Korean undergraduates, U.S. MTurk workers, and British Prolific workers (Hong, Sedikides, & Wildschut, 2022, Studies 1–3).

Experimental Evidence

DIRECT EFFECTS OF NOSTALGIA ON SELF-CONTINUITY. The positive association of nostalgia with self-continuity invites explication. As mentioned previously, nostalgic reflections typically refer to events (e.g., achievements, family customs, cultural rituals) that are steeped in meaning (Routledge et al., 2011; Wildschut et al., 2006; Yin, Jiang, Wildschut, & Sedikides, 2024). These events are personally important and textured, and they often reflect traditions that unite one's past with one's present. The events enshroud and elucidate the person's life trajectory (e.g., how one transitioned "from then to now") and serve as signposts that aid navigation through life. Memories of those events are likely to foster temporal continuity.

A sizeable literature has established the causal influence of nostalgia on self-continuity. Pertinent research has induced nostalgia and assessed self-continuity in multiple ways, following a converging operations approach (Campbell & Fiske, 1959). Nostalgia, induced via the ERT, increased self-continuity, assessed with the 8-item Self-Continuity Index, in U.S. undergraduates (Sedikides, Wildschut, Routledge, & Arndt, 2015, Experiment 3). This index subsumes the 4-item Self-Continuity Index and also includes the following items: "The past and present flow seamlessly together"; "The present is a mere continuation of the past";

"There is continuity between the past and present"; "The past merges nicely into the present." Likewise, nostalgia, induced via the ERT, (1) elevated self-continuity, assessed with the 8-item Self-Continuity Index in Chinese participants recruited from So Jump Survey (a survey platform; Wang, Tian, Sarigöllü, & Xu, 2020), and (2) elevated self-continuity, assessed with 4-item Self-Continuity Index, in U.S. MTurkers (Lasaleta & Loveland, 2019, Study 1) and British undergraduates (Biskas, Juhl, Wildschut, Sedikides, & Saroglou, 2022, Study 3). These findings were replicated in British undergraduates with a variant of the ERT that included not only a neutral memories condition (i.e., ordinary event) but also a positive memories condition (i.e., a positive event; Sedikides, Wildschut, Routledge, & Arndt, 2015, Experiment 4). Moreover, the findings were replicated with the standard ERT in undergraduates from 28 countries and a special administrative region of China (i.e., Hong Kong) across five continents (Hepper et al., 2024).

Other ERT experiments demonstrated the robustness of nostalgia's causal impact on self-continuity, assessed with the 4-item Self-Continuity Index. In particular, nostalgia increased self-continuity in Syrian refugees residing in Saudi Arabia (Wildschut, Sedikides, & Alowidy, 2019) and in British individuals living with Alzheimer disease (Ismail et al., 2018, Experiment 1).

Is the effect of nostalgia on self-continuity independent of other modes of contemplating one's past? Such modes include reflection and brooding. Reflection is an attempt to understand the reasons underlying one's (especially negative) affective states, whereas brooding is a persistent, if not repetitive, focus on the causes of one's (especially negative) affective states (Miranda & Nolen-Hoeksema, 2007; Treynor, Gonzalez, & Nolen-Hoeksema, 2003). An experiment testing both British and Chinese undergraduates addressed this issue (Jiang, Cheung, Wildschut, & Sedikides, 2021). The experiment additionally introduced a novel manipulation of nostalgia and, correspondingly, of reflection and brooding. The nostalgia manipulation relied on analyses of the prototype of the construct across cultures (Hepper et al., 2012, 2014). These analyses revealed the following five highly prototypical features of the construct: "bringing to mind rose-tinted memories," "reflecting on keepsakes," "longing for a time or place from my past," "thinking about my family and friends," and "remembering my childhood" (see also Cheung, Sedikides, & Wildschut, 2017). Based on standardized scales of reflection and brooding (Treynor et al., 2003), the authors (Jiang, Cheung, et al., 2021) abstracted five prototypical features of reflection (i.e., "analyzing the event, trying to understand why it happened"; "going away and reflect on why I feel in certain ways"; "writing down what I was thinking and analyze it"; "analyzing my personality to try to understand

why it happened"; "going somewhere along to think about my feelings related to what happened") and five prototypical features of brooding ("wishing things had gone better," "asking why I have problems other people don't have," "asking why I always react this way," "asking what am I doing to deserve this," "asking why can't I handle things better"). An advantage of this manipulation is that it does not include the pertinent terms (i.e., "nostalgia," "reflection," "brooding"), thus reducing potential demand characteristics. Participants were randomly assigned to the nostalgia, reflection, and brooding conditions. They brought to mind an event in their lives that was characterized by the five features corresponding to their mode of contemplating the past and described the event in writing. Nostalgia increased self-continuity (assessed with the 4-item Self-Continuity Index) in both British and Chinese samples, above and beyond reflection and brooding.

All reviewed experiments so far manipulated nostalgia either with the ERT (Hepper et al., 2024; Ismail et al., 2018, Experiment 1; Sedikides, Wildschut, Routledge, & Arndt, 2015, Experiments 3 and 4; Wildschut et al., 2019) or an alternative narrative induction technique (Jiang, Cheung, et al., 2021). Nostalgia has also been manipulated with music among individuals living with Alzheimer disease (Ismail et al., 2018, Experiment 2). Initially, participants submitted three of their favorite nostalgic songs. At a later session, they were randomly assigned to the nostalgia or control condition. A given participant in the nostalgia condition listened to one of three songs (randomly determined) that they had submitted previously. The same song was played to a yoked participant in the control condition. Participants immersed themselves in the song, spent a couple of minutes thinking about how it made them feel, and wrote about a past experience or event associated with the song. Participants in the nostalgia condition reported higher self-continuity (assessed with the 4-item Self-Continuity Scale) than their control-condition counterparts.

Relatedly, nostalgia has been evoked via scents among U.S. undergraduates (Reid, Green, Wildschut, & Sedikides, 2015). A pretest identified 12 appropriate scented oils for later use (out of 33). These included Chanel No. 5 (a perfume), Purrs and Paws (a pet fragrance scented with citrus and fresh flowers), eggnog, apple pie, fresh-cut roses, and cappuccino. In the quasi-experiment that followed, participants were presented with scents in glass test tubes, one at a time and in random order, and continued to smell each scent while completing the dependent measures. In particular, they reported their level of nostalgia ("How nostalgic does this scent make you feel?") and level of self-continuity ("connected with my past," "important aspects of my personality remain the same across time"—both items derived from the Self-Continuity Index). Higher

intensity of scent-evoked nostalgia predicted greater self-continuity. Similarly, nostalgia has been manipulated among U.S. MTurkers with scents (i.e., fragrance, sunscreen) that were past focused to elicit nostalgia versus present focused (control). Self-continuity was measured with the 4-item Self-Continuity Index. Nostalgia amplified self-continuity (Ju, Kim, Chang, & Bluck, 2016, Studies 1a and 1b).

In addition, nostalgia has been manipulated behaviorally. Chinese master of business administration (MBA) students who chose cookies from a nostalgia brand (Want Want) versus a non-nostalgic brand (Kraft Foods) reported higher self-continuity, as measured by the 4-item Self-Continuity Index (Xu & Jin, 2020).

As mentioned previously, self-continuity has been conceptualized and measured not just in terms of the perceived connection between one's past and present selves but also in terms of the perceived connection among one's past, present, and future selves (i.e., global self-continuity; Becker et al., 2018). Nostalgia, manipulated with the ERT, elevated global self-continuity in a British Prolific sample (Hong et al., 2021, Study 2).

The influence of nostalgia on self-continuity has also been examined in an intervention (Layous, Kurtz, Wildschut, & Sedikides, 2022). U.S. undergraduates completed the ERT every week for 6 consecutive weeks. Self-continuity was assessed (with the 4-item Self-Continuity Index) immediately after each weekly nostalgia induction. Nostalgia fostered self-continuity throughout the 6-week intervention.

Finally, nostalgia and self-continuity are transmitted intergenerationally (Wildschut, Sedikides, & Robertson, 2018). Participants were younger adults (i.e., British undergraduates). They were presented with one of five nostalgic narratives and one of five ordinary narratives, randomly selected from a large pool of narratives. The 10 narratives were statistically treated as a random variable (Judd, Westfall, & Kenny, 2012) for generalizability purposes. Participants learned that each narrative referred to a genuine event recalled and written by an older adult. Participants took a few minutes to read and reflect on each narrative. Subsequently, they rated their level of nostalgia on three items (e.g., "Right now, I am feeling quite nostalgic"; Wildschut et al., 2006) and their level of self-continuity on the 4-item Self-Continuity Index. Participants who read a nostalgic (vs. ordinary) narrative reported greater nostalgia, which in turn was associated with higher self-continuity.

INDIRECT EFFECTS OF NOSTALGIA ON SELF-CONTINUITY. How might nostalgia increase self-continuity? Social connectedness, the subjective experience of acceptance and belongingness, is a prime candidate. Nostalgia is a social emotion. During nostalgic reverie, "the mind

is 'peopled' " (Hertz, 1990, p. 195) as one reestablishes a symbolic bond with close others. Nostalgic events often depict socializing with close others (Abeyta, Routledge, Roylance, Wildschut, & Sedikides, 2015; Wildschut et al., 2006). As a case in point, nostalgic (vs. ordinary) narratives contain a higher proportion of first-person plural pronouns, more social interactions, stronger expressions of companionship (Wildschut et al., 2018), and an increased number of social terms (e.g., *family*, *friend*, *love*, *child*, *people*; Chen, Wildschut, Layous, & Sedikides, 2023). Moreover, manipulated nostalgia galvanizes a sense of attachment to close others (Wildschut et al., 2006; Wildschut, Sedikides, Routledge, Arndt, & Cordaro2010) and ingroups (Abakoumkin, Wildschut, Sedikides, & Bakarou, 2017), and it strengthens perceptions of social support from one's networks (Zhou, Sedikides, Wildschut, & Gao, 2008). In all, nostalgia augments social connectedness (Juhl & Biskas, 2023; Sedikides & Wildschut, 2019).

Nostalgic events often reflect relational or cultural rituals, such as Thanksgiving, festivals, and national holidays (Yin et al., 2024; Yin, Jiang, Thomas, Wildschut, & Sedikides, 2025). These rituals are largely defined by the people surrounding the nostalgizer, and they weave the narrative thread of one's close relationships. For example, nostalgic recollections of a childhood family Thanksgiving may evoke memories of other Thanksgivings and thus constitute a mental storyboard of one's relationships with parents and siblings across the years, thereby contributing to self-continuity.

A series of experiments tested and supported the idea that social connectedness mediates the effect of nostalgia on self-continuity (Sedikides et al., 2016). In all experiments, social connectedness was assessed with the relevant 4-item ("I feel connected to loved ones"; "I feel protected"; "I feel loved"; "I feel I can trust others") subscale of the Nostalgia Functions Scale (Hepper et al., 2012), whereas self-continuity was assessed with the 4-item Self-Continuity Index. In Experiment 1, testing British undergraduates, nostalgia was induced via music (as in Ismail et al., 2018, Experiment 2). In Experiment 2, testing both British and Chinese undergraduates, nostalgia was induced with the ERT. In Experiment 3, testing U.S. MTurk workers, nostalgia was induced with a variation of the ERT, in which control participants brought to mind a positive past event ("[B]ring to mind a lucky event in your life. Specifically, try to think of a positive past event that was brought on by chance rather than through your own actions"; Sedikides et al., 2016, p. 529).

Follow-up research replicated and extended this mediational pattern (Abakoumkin, Hepper, Wildschut, & Sedikides, 2019). Social connectedness and self-continuity were assessed as described previously. In Experiment 1, a three-condition ERT was implemented among Greek

undergraduates. One control condition provided general instructions ("[T]hink of an ordinary event in your life"; p. 132), whereas the other gave specific instructions ("[T]hink of a past event that is completely ordinary, common, everyday. For example, an event like taking the city bus to get from one place to another"; p. 133). In Experiment 2, nostalgia was induced via both the standard ERT and a prototype-based manipulation (as in Jiang, Cheung, et al., 2021) among British undergraduates. With the prototype-based manipulation, participants in the nostalgia condition brought to mind an event characterized by central features of nostalgia (e.g., "reminiscence," "keepsakes, "familiar smells," "rose-tinted memories"), whereas participants in the control condition brought to mind an event characterized by peripheral nostalgia features (i.e., "daydreaming," "wishing," "bittersweet," "achievements").

All five experiments that we reviewed (Abakoumkin et al., 2019, Experiments 1 and 2; Sedikides et al., 2016, Experiments 1–3) tested and supported the mediational model—namely, that the impact of nostalgia on self-continuity is transmitted by social connectedness. However, these experiments implemented a measurement-of-mediation design. Such designs have come under criticism for leaving open alternative interpretations (Maxwell & Cole, 2007; O'Laughlin, Martin, & Ferre, 2018). In our case, both the mediator (i.e., social connectedness) and the dependent variable (i.e., self-continuity) were measured, a practice that introduces uncertainty regarding their causal ordering. Yet measurement-of-mediation designs are also informative because they place the hypothesis at risk (Anderson & Bushman, 1997; Fiedler, Schott, & Meiser, 2011), thus increasing its empirical plausibility when supported. Nevertheless, more conclusive evidence would be obtained by using an experimental-causal-chain design (Spencer, Zanna, & Fong, 2005), in which the mediator is manipulated, assessing its causal influence on the dependent measure.

Sedikides et al. (2016, Experiment 4) used such a design among British undergraduates. Social connectedness was operationalized in terms of loneliness (Wildschut et al., 2006; Zhou et al., 2008). High social connectedness was assumed to involve low loneliness, and vice versa. Participants filled out the ostensible "Southampton Loneliness Scale," which consisted of 15 statements derived from the UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980). Participants indicated whether they disagreed or agreed with each item. In the high-social-connectedness condition, the items were worded so as to draw out disagreement (e.g., "I always feel that I am 'out of tune' with the people around me"), whereas in the low-social-connectedness condition, the items were worded so as to draw out agreement (e.g., "I sometimes feel that I am 'out of tune' with the people around me"). Next, participants

received bogus feedback. Those in the high-social-connectedness condition were told that they were in the 12th percentile of the loneliness score distribution and were thus "very low on loneliness" relative to their peers. Those in the low-social-connectedness condition were told that they were in the 62nd percentile of the loneliness score distribution and were thus "above average on loneliness" relative to their peers. Finally, participants were asked to list reasons why their scores were so low or high. The manipulation of social connectedness was effective. Afterward, participants complete the 4-item Social Continuity Index. Participants with high social connectedness reported greater self-continuity compared with those with low social connectedness. This finding reinforced the status of social connectedness as a mediator of nostalgia's effect on self-continuity.

Self-Continuity Is Associated with, or Augments, Meaning

Self-continuity engenders the perception that one's life is coherent, predictable, or comprehensible (Sedikides et al., 2023). It stands to reason, then, that nostalgia-induced self-continuity would be positively related to meaning, and this hypothesis was supported in several studies (Evans et al., 2021; Hepper et al., 2024; Wildschut et al., 2019). In these studies, self-continuity was measured with the 4-item Self-Continuity Scale, and meaning was measured with the 4-item subscale of the Nostalgia Functions Scale (Hepper et al., 2012). The specific items, preceded by the stem "I feel that . . . ," were as follows: "life is meaningful," "life has a purpose," "there is a greater purpose to life," and "life is worth living."

Further, self-continuity causally affects meaning (Van Tilburg, Sedikides, Wildschut, & Vingerhoets, 2019, Study 1). U.S. MTurkers underwent a self-continuity manipulation (after Sedikides, Wildschut, Routledge, & Arndt, 2015, Study 2). Participants in the high-self-continuity condition were asked to describe an important aspect of their lives that "you believe characterized you in the past, and continues to characterize you in the present," whereas participants in the low-self-continuity condition were asked to describe an important aspect of their life that "you believe characterized you in the past, but no longer characterizes you in the present" (Van Tilburg et al., 2019, p. 523). Afterward, all participants responded to two meaning items ("I feel that life is meaningful"; "I feel that life has a purpose"). Participants in the high-self-continuity condition reported greater meaning than those in the low-self-continuity condition.

A large literature has established not only that nostalgic events are meaningful but also that experimentally manipulated nostalgia increases meaning (Sedikides & Wildschut, 2018, 2024a). More importantly,

self-continuity mediates the effect of nostalgia on meaning (Van Tilburg et al., 2019, Study 1). In a sample of Irish community members, nostalgia was induced with the ERT, self-continuity was measured with the 4-item Self-Continuity Scale, and meaning was measured with five items (preceded by the stem "This memory gives me . . ."): "a sense of meaning," "a sense of purpose," "the impression that things make sense," "a sense of value," and "a sense of significance" (after Van Tilburg, Igou, & Sedikides, 2013, Study 6). Nostalgia augmented meaning via self-continuity. This finding was replicated in an ERT experiment in which self-continuity was also measured with the 4-item Self-Continuity Scale, but meaning was measured with the 4-item subscale of the Nostalgia Functions Scale (Biskas et al., 2022, Study 3).

Moreover, this pattern was replicated with a music induction of nostalgia in Dutch community samples. In a within-participants design (Van Tilburg et al., 2019, Study 3), participants listened to a nostalgic song and a happy (control) song. After listening to each song, they completed measures of self-continuity (whether the song made them feel "connected to your past" and "that there is continuity in your life") and of meaning (whether the song made them feel that "life is meaningful" and "life has a purpose"). In a between-participants design (Van Tilburg et al., 2019, Study 4), participants listened either to a nostalgic song or a happy (control) song before completing the same measures of self-continuity and meaning. In both studies, the effect of nostalgia on meaning was transmitted by self-continuity.

CONCLUDING REMARKS

Guided by the regulatory model of nostalgia, we reviewed findings on the interplay of self-discontinuity, nostalgia, self-continuity, and meaning. Self-discontinuity is associated with, or leads to, nostalgia. In turn, nostalgia reestablishes self-continuity, which is a source of meaning. The regulatory model is based on the assumption that people actively create meaning (chapter 1, Fishbach, Fujita, and Liberman, this volume), and we argued that they do so, in part, through nostalgia and self-continuity. Yet the regulatory model could be enriched by addressing various issues.

The Character of the Instigating Events

One set of issues entails the character of the event that sets the regulatory cycle in motion. How disruptive or unfavorable should an event be? A longitudinal study included events ranging in unfavorability, but data analyses collapsed across them (Wang, Wildschut, Sedikides, Wu, & Ca,

2024). A curvilinear relation is plausible: Nostalgia might be instigated by moderately disruptive, rather than trivially or overwhelmingly disruptive, events.

Self-discontinuity can involve temporal or psychological distance from the present; it can also involve social distance, such as when a person was an important part of one's life but no longer has that role (Liberman & Trope, 2014). Is the strength of nostalgia as a regulatory mechanism equally effective for both kinds of distance?

We discussed discontinuity between one's past and present selves. Discontinuity, however, can also pertain to one's present versus future selves (Hershfield, 2023). For example, one may interact virtually with their aged future self (Shen, Nelson, & Oberlin, 2022) or write a letter to their future self that differs on socioeconomic (e.g., social class) variables (Simić, Vardo, & Solaković, 2021). Is the regulatory model equally effective in the case of future self-discontinuity? Preliminary evidence indicates that it is.

Metamotivation

Another set of issues entails metamotivation, the "psychological processes that monitor and modify motivational states" (Fujita, Le, Scholer, & Miele, 2024, p. 2). What is the nature of the association between self-discontinuity and nostalgia? Is this association part of the individual's coping repertoire intended to maintain homeostasis (Sedikides, 2021), or is it formed consciously or metamotivationally? The same questions apply to the association between nostalgia and self-continuity, as well as meaning.

As a potent response to self-discontinuity, nostalgia could be widely implemented as an intervention strategy. Prior attempts, though, have indicated that nostalgia is more effective among individuals who are dispositionally high on nostalgia (Layous et al., 2022; Sedikides & Wildschut, 2024b). It is likely that high nostalgics have better metamotivational insight into the emotion's benefits than low nostalgics. If so, interventions should be tailored differently for low nostalgics, teaching them how to reap the benefits of nostalgic reverie.

Generalizability and Neuronal Underpinnings

Our conceptual framework invites comprehensive testing in cross-sectional, longitudinal, momentary-ecological-assessment, and experimental investigations. Also, it invites examinations of its generalizability across cultures and across ages. For example, some research suggests that Chinese (compared with Canadians of European descent) individuals

report higher self-continuity as a result of feeling closer to their past and present selves (Ji et al., 2019). In addition, some research indicates that older (compared with younger) adults experience more nostalgia (Madoglou, Gkinopoulos, Xanthopoulos, & Kalamaras, 2017) and self-continuity (Liao & Bluck, 2023). Might this explain why older adults sometimes report more meaning than younger adults (Morgan & Robinson, 2013; Reker, Peacock, & Wong, 1987)? Finally, future work will do well to examine how the interplay among self-discontinuity, nostalgia, self-continuity, and meaning is reflected in brain processes (Di Domenico et al., 2018; Kang et al., 2019; Yang, Strecher, Kim, & Falk, 2023).

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