

## Chapter 12

# Any Second Could Be *the* Second: How Thinking About What Might Have Been Affects the Emergence of Meaning and Commitment Across the Adult Life Span

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When major decisions arise, people make choices that immediately set them on particular life paths and trajectories. Such pivotal moments have been dramatized in literature (e.g., Frost's (1969) famous poem, "The Road Not Taken"), film (e.g., *Sliding Doors*), and even in a recent series of AT&T commercials that portray this phenomenon as it relates to modern day life. In one such commercial, the narrative moves backward in time from a president being inaugurated, to his early childhood, to his parents buying their first home, and to their first date at a movie theater. The commercial ends with a younger version of the president's father waiting idly for a train as he suddenly notices a gorgeous woman sitting in the passenger car across the platform. When he instantly changes his ticket (wirelessly, on his AT&T phone of course) so that he can have the opportunity to meet her, the tagline "Any second could be the second" plays across the screen. Naturally, we are left to wonder: What if he hadn't been able to change his train ticket? Would the course of his life have played out differently? Would another opportunity have arisen to unite him with his wife and mother of his child (the future president, no less)? In this chapter, we propose that how people think about past events and decisions – whether and how they consider those seemingly chance events and alternative realities that might have been – fosters an appreciation for both those defining moments from the past, as well as the present reality that these moments helped to construct.

Counterfactual thinking is the pondering of "what might have been" (Roese 1997). This cognitive process often plays a crucial role in the creation of meaning across the life span. The passage of a lifetime is marked by defining moments, including new beginnings, endings, and unforeseen twists of fate when life suddenly changes

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direction. A personal conceptualization of the significance of these key experiences gives us a sense of who we are, fortifies our most cherished relationships, and enforces our most deeply felt values. In addition to providing raw material for dramatic storytelling, as in the phone commercial referenced above, counterfactual reflection plays a central role in the construction of personal meaning. By highlighting the significance of these pivotal moments in time, counterfactual thinking spawns a greater sense of appreciation and commitment toward important people or entities in our lives.

Although there is a burgeoning body of work devoted to the study of counterfactual reflection and its impact on meaning in life (Ersner-Hershfield et al. 2010; Kray et al. 2010), relatively little research has focused on the ways that such thoughts might change as people grow older and navigate their way through old age. Yet, as the twilight of life approaches, individuals are increasingly prone to making sense of and understanding the life that has unfolded before them (Erikson 1968). In this chapter, we explore the relationship between counterfactuals, the creation of meaning, and the sense of commitment that arises from such reflection across the adult life span. To do so, we have organized our thoughts into four sections. First, we briefly review previous research on the role of counterfactual mindsets, or cognitive orientations, in establishing causal relationships. Second, we explore the implications of the deliberate construction of counterfactuals for the emergence of personal meaning. Third, we review the different ways in which counterfactual reflection promotes commitment to a variety of entities. Finally, drawing on research and theory from the study of aging and emotion, we identify unanswered questions and possible future directions regarding the role that counterfactual thought might play in old age.

## Counterfactual Mindsets: Understanding Relationships and Problem Solving

Imagine being at a rock concert of one of your favorite bands. Seating is on a first come, first serve basis. The announcer indicates that a trip to Hawaii will be given to a lucky fan based on a random drawing of seat numbers. Now imagine that just prior to this announcement you had switched seats because your view of the stage was partially blocked. It turns out that the winning seat was the seat you *had just moved to*. If you are like the many of participants who have participated in experiments using the above scenario, you would instantly and spontaneously conjure up thoughts such as “if only I had not moved, I would not have won” (Kahneman and Miller 1986).

Counterfactual thought is activated by such near misses and unusual paths – what researchers call *almost* and *abnormal* counterfactuals (Sanna and Turley 1996). For example, missing a plane flight by 5 min generates more counterfactual “what ifs” than missing a flight by 45 min (Kahneman and Miller 1986). Unusual or abnormal components within a sequence of events, such as taking a new route to the airport (and subsequently missing the flight), can also produce counterfactual thinking.

Constructing a counterfactual thought implicitly involves laying out an if-then causal chain of events and mutating one step in the process to construct an alternate reality. For example, while standing at the gate looking at one's barely missed departing flight, one might reflect on the sequences of actions that led up to this point: running into friends and grabbing a cup of coffee with them, then encountering traffic en route to the airport and a long wait at the security checkpoint. Reviewing the sequence, an alternate, unrealized outcome arises by changing only one single step of the process: "If only I had not packed the extra liquids and had avoided the delay through security." When a mutation undoes the outcome, that mutated event is seen as the causal force behind what happened later (Wells et al. 1987).

Engaging in counterfactual thought is critical for proper mental functioning. For example, both schizophrenia patients (Hooker et al. 2000) and Parkinson's patients (McNamara et al. 2003) have difficulty in articulating counterfactual thoughts. Considering counterfactuals helps people prepare more effectively for what is to come – engaging in counterfactual thinking helps people both capitalize on their successes and avoid their past failures (Roese 1994; Galinsky et al. 2002). Taken together, research on the counterfactual mind-set over the last 10 years (e.g., Galinsky and Kray 2004; Kray and Galinsky 2003; Kray et al. 2006, 2009) suggests that counterfactual thinking fundamentally alters how we approach the future. Recent work, however, has begun to shed light on the ways in which reflecting counterfactually on the past can also affect how we understand, make sense of, and find meaning in past events as well as significance in the present.

## **Counterfactual Reflection and the Construction of Meaning**

Namely, in a series of studies examining how people make sense of their closest relationships, significant choices, and defining moments, counterfactual reflection has proven to be a powerful tool for extracting meaning. Because counterfactual thinking helps to establish relationships and connections between variables, when applied to one's own life it can help to connect the dots among life experiences. Even negative events involving the loss of loved ones can be appreciated for the benefits that came about as a result. It simply requires considering a counterfactual world in which a particular loss had not occurred. For example, losing a parent at a young age can help an individual to appreciate each moment in life and to be more compassionate toward others' suffering. Whereas directly reflecting on the meaning of the loss may fall short of its intent by highlighting the ensuing grief and despair, counterfactual reflection may provide an end run around the grief, instead of clarifying the ways in which the parentless individual has grown as a result of the experience and become the person that they are today. Another mechanism through which counterfactual reflection creates meaning is by increasing a sense of fate in one's life. When considering alternate paths that life might have taken but did not, the path that life actually took may appear meant to be. Taken together, counterfactual reflection emphasizes

the benefits derived from pivotal life experiences and fosters an appreciation for the running narrative of one's life as captured by the concept of fate.

## Promoting Commitment Through Counterfactual Reflection

In our research, we have explored the stories that people tell about the origins of an important entity's existence and how counterfactual thought bolsters their commitment to that entity. Commitment is an important variable for understanding the strength of social connections (Sprecher 2001). To illustrate, consider the origin stories of both FedEx and the United States. Fred Smith, the founder of FedEx, flew one night in 1973 to a Las Vegas casino in a desperate attempt to help his then-floundering company meet payroll. He won \$27,000 at the blackjack table and was able to keep his company afloat. Almost 200 years earlier, on April 18, 1775, Paul Revere took a fateful midnight ride to alert his fellow colonists of the impending march by the British Army, a ride that produced a sizable militia that stood down the superior British fighting force. FedEx and the United States are both marked by strong commitment of their various constituents and an almost fanatical devotion to their missions. FedEx is regularly listed in *Fortune* magazine's list of top companies to work for (Levering and Moskowitz 2009), and Americans express more national pride than citizens from any other country (Smith and Kim 2003). Not only do FedEx and America inspire patriotism and commitment, but both also possess origins that easily produce counterfactual reflection. It is easy, for example, to imagine how democracy might not have flourished without Revere's ride or how FedEx might not exist today if Smith had not made his blackjack bet.

As noted above, Kray et al. (2010) showed that if a particular turning point was thought about in counterfactual terms, then that turning point became a more meaningful part of one's history. Similarly, Koo et al. (2008) found that individuals expressed greater satisfaction with positive life events when they imagined how these events might not have happened. In recent research, we explored an even broader phenomenon by examining whether counterfactual reflection about origins could affect subsequent behavior indicative of commitment (Ersner-Hershfield et al. 2010). We reasoned that if thinking about what might have been can produce a heightened sense of meaningfulness, then counterfactual reflection should also strengthen the bond that one feels to the targets of such thoughts.

In one study, for example, participants in a counterfactual reflection condition were asked to think about what the world would be like if their country of origin, and all the relevant people and events that led to its creation, had never existed. In a control condition (i.e., the "factual reflection condition"), participants simply reflected on what the world is like now *because* their country of origin existed. Those participants who had reflected counterfactually about their country's origins expressed higher levels of patriotism (a measure of commitment) on a subsequent task.

## ***Counterfactual Reflection and Thoughts About the Future***

But how exactly does counterfactual reflection boost commitment to a given entity or group? Although counterfactuals are by definition about the past (counter to the facts of what actually happened) and the stories people tell about their own lives are by definition works in progress, counterfactual thought also influences how anticipated endings are experienced. Previous work has found that when individuals face meaningful endings in their lives, a mixed emotional experience known as *poignancy* occurs (Ersner-Hershfield et al. 2008). Graduation day, for example, is marked by poignancy because while it is a happy occasion due to the progress and accomplishments that it marks, it is also sad: Graduating seniors realize that many cherished aspects of their life will not be with them anymore. Similarly, thinking counterfactually about important people or entities evokes this same “near-loss” mindset. In other words, when pondering what might have been, thoughts inevitably arise about what it would have been like to live in a world without the targets of our counterfactual reflection.

In a follow-up study, we explored the ways in which thinking about imminent endings (real or perceived) might underlie the relationship between counterfactual reflection and commitment. We hypothesized that the poignant feelings arising from counterfactual reflection would make people more attached to the target in question. Thinking about losing something cherished makes individuals want to hold on to that thing more and more (King et al. 2009; Kurtz 2008). Behaviorally and attitudinally, these feelings are expressed as commitment. Indeed, we found that feelings of poignancy mediated the relationship between counterfactual reflection about one’s company or firm and commitment to that entity (Ersner-Hershfield et al. 2010).

Not only can counterfactual reflection alter commitment through feelings of poignancy, but it can also change the perceived trajectories of an organization of which one is a part. Participants in the study above were asked to select a drawing that most closely captured their expectations of the future of an organization to which they belonged. The drawings were of arrows that either ascended, descended, or remained straight. Participants who had just engaged in counterfactual reflection about the origins of their chosen organization were more likely to select an upward sloping trajectory compared to baseline conditions. Just like the tendency to recognize the benefits derived from past life experiences (in other words to appreciate how we are better off today than we were yesterday), counterfactual reflection also appears to instill an optimistic belief that tomorrow will be better than today.

In follow-up work, we asked research participants to imagine working for a hypothetical company whose origin story either highlighted counterfactual themes or did not (Ersner-Hershfield et al. 2010). We demonstrated that participants in the counterfactual condition expressed a greater willingness to work for and be committed to this company, compared to participants in a control condition. Importantly, we also asked participants to report the extent to which they felt that their involvement in the hypothetical company would be “meant to be” or “fated.” Participants in the counterfactual condition not only felt that working for the hypothetical company was more meant to be, but this sense of fate also mediated the relationship between counterfactual reflection and commitment to that company.

## ***Counterfactual Reflection and Behavioral Change***

Such effects, however, are not just confined to attitudes and intentions, as they also can be seen in the domain of relationships. In one study we conducted, for example, participants either reflected counterfactually or factually about the origins of a significant business relationship (Ersner-Hershfield et al. 2010). Approximately 2 weeks later, we surveyed these participants and asked them to report how often they had contacted a host of different people in their lives. Strikingly, participants in our experimental condition were significantly more likely to demonstrate behavioral commitment by reaching out to the targets of their reflection (i.e., the important business contact) than participants in the control condition. This finding suggests that the power of counterfactual reflection is not confined merely to how our lives are understood but also influences how our lives are shaped by action.

## **Counterfactual Reflection Across the Life Span**

Although the literature on counterfactual reflection and its effects on meaning and commitment has advanced significantly in recent years, research in this sphere has been largely confined to college undergraduates and younger adults. Understanding the extent to which such relationships apply to adults across the life span – particularly older adults – is not only an interesting question for the sake of generalizability but also for the light that it may shed on the ways in which humans approach the end of life. Why, however, might counterfactual reflection impact older adults differently than it would their younger counterparts? At its core, counterfactual reflection is concerned with the ways that people view the past and conceive of the future (especially with regard to the construction of meaning and further commitment to important entities). Yet, recent work has shown that younger and older adults approach the passage of time in very different ways (Carstensen 2006). On a fundamental level, older adults have experienced more twists and turns along their life path than individuals for whom their life stories are largely ahead of them. The mere fact that age determines where one is at on the life journey may influence how hypothetical lives are experienced. Below, we review relevant work and suggest questions for possible future research.

## ***The Passage of Time and Meaningfulness***

In efforts to tap a sample with a wider age range, we administered a survey to business school alumni who had graduated from business school between 1967 and 2010. We found that the passage of time brought a greater sense that individuals' careers had been meaningful. Older alumni were more likely to idealize their career and to believe that they had obtained the important parts of what they wanted out of

their career. After reflecting counterfactually on their lives, older adults were less likely to say that they spent time thinking about how they might have done things differently or to think about the good things they might have missed out on in their career. Yet, older alumni did report greater surprise at their decision to attend business school. In combination, these findings suggest that, as life unfolds, the positive experiences along the way are better appreciated and regrets dissipate. As specific events fade further into the past, it seems people begin to see their lives through a broader scope rather than focusing on specific details.

These results fit well into the framework of Socioemotional Selectivity Theory (SST), in which Carstensen and colleagues have posited that as time passes and people grow older, activities that are devoid of meaning are less interesting and desirable. Interest in novel information – because it is closely linked to future needs – declines. Instead, the increasing awareness of time constraints focuses attention on the present, and this temporal shift increases the value that people place on the most important, and hence meaningful, aspects of life. When the future is seen as expansive and endings are not acutely anticipated – a perception that occurs for most healthy younger people – greater focus is placed on knowledge-related goals and information seeking. By contrast, when individuals approach endings, they are motivated to pursue emotionally meaningful goals and focus more on the here and now (Carstensen et al. 1999; Ersner-Hershfield et al. 2008). This increased focus on pursuing emotionally meaningful goals in the present leads to an intensified desire for and ultimate experience of more positive emotion and less negative emotion over time. Indeed, although most aspects of emotional functioning, such as physiological reactivity, subjective intensity, and facial expression, are quite stable (e.g., Levenson 2000), everyday emotional experience does change with age. Most notably, relative to their younger counterparts, older adults report fewer negative emotional experiences (Carstensen et al. 2000, 2011; Gross et al. 1997; Mroczek and Kolarz 1998), especially reductions in anger (Lawton et al. 1993; Magai 1999), coupled with increases in positive affect (Mroczek and Kolarz 1998) or sustained levels of positive emotions (Carstensen et al. 2000, 2011). One recent study, for example, surveyed 340,000 American adults and found that global well-being (Stone et al. 2010) increased significantly with age.

These positive changes in emotional experience, however, should not be misinterpreted to suggest that older adults are simply leading more hedonistic, care-free lives than their younger counterparts are. On the contrary, the types of emotional changes that occur with age point toward a more eudaimonic sense of meaningfulness and well-being in life (i.e., one that is focused on creating a full, meaningful life, rather than one that is simply consumed by the pursuit of pleasure (Ryan and Deci 2000)). Peterson et al. (2005), for example, have shown that as people move through the life span, the focus on pleasure-seeking decreases. And contrary to a hedonistic account of unidirectional positive emotional experiences, recent work has demonstrated that older adults experience more complex emotional states than younger adults do. For instance, positive and negative emotions co-occur more frequently as people grow older (Carstensen et al. 2000, 2011; Ong and Bergeman 2004), and written descriptions of emotion tend to be more complex (Labouvie-Vief et al. 1989).



Socioemotional selectivity theory holds that these changes in emotional experience arise as a function of differing views of the future. Older adults, for whom the future is relatively limited, are more motivated to focus on the here and now. Younger adults, by contrast, have lengthy horizons ahead of them and thus focus on knowledge and information that might benefit them in the future. Yet, there is another major difference related to time that characterizes the lives of the young and old. Namely, older adults have a much longer past and therefore a greater number of previous life events on which to reflect. Relating the findings to counterfactual thought, it is interesting to consider work on the impact of time on regret experienced by acts of commission versus omission. Regret can be conceived of in terms of both action and inaction. Both types function differently depending on the temporal distance from the event in question. In the short term, people experience more pain over regrettable actions such as choosing to go to a concert instead of studying and consequently earning a poor grade on a midterm. However, over the long term, people experience more pain over inactions, like choosing to forgo the concert experience entirely to stay at home studying (Gilovich and Medvec 1995). Because regret over inaction can promote learning and creativity (Markman et al. 2007), it is likely that the wisdom typically associated with older adults is derived via the accumulation of regretted inactions.

### ***Do Age Differences in Spontaneous Counterfactual Reflection Exist?***

The way in which older adults ponder and consider past events, however, is relatively unknown. Recall that previous research has demonstrated that considering counterfactuals helps people both capitalize on previous successes and avoid past failures (Roese 1994; Galinsky et al. 2002). Healthy psychological adjustment leads to more frequent generation of such counterfactuals (Hooker et al. 2000) – presumably because over time, an individual gradually learns the benefits of engaging in such reflections. But when the future is seen as short, and one is more oriented toward the present – as is the case with older adults – could these inherent benefits of counterfactual reflection somehow lose their appeal? Without a long future in which to reap the benefits of counterfactual reflection, in other words, an individual may be less likely to generate “what ifs.” This line of reasoning would suggest that older adults, compared to younger adults, might engage in *less* spontaneous counterfactual reflection.

Yet, a more compelling pattern may also be possible. Given that counterfactual reflection produces perceptions of meaningfulness in life (Kray et al. 2010) and older adults as a group seem to experience a deeper sense of well-being than younger adults, it is possible that older adults spontaneously engage in counterfactual reflection about origins of events and people in their lives more than younger people do. This spontaneous counterfactual reflection about past events could in turn lead to higher levels of well-being and perceptions of meaning in life. Indeed, an examination of reminiscence



in aging suggested that when older adults looked back on the past, the ones who did so in a way that led to a more integrative and coherent story of past life events showed higher than average ratings in mental and physical health (Wong and Watt 1991). Future work thus needs to examine whether older adults differ from younger adults in their natural inclination to engage in counterfactual reflection and whether such thoughts can enhance meaningfulness. (For a different, but related perspective on mixed emotions and reflection on the past, see Routledge et al.'s (2011) work on nostalgia and perceptions of meaningfulness.)

### ***How Might Directed Counterfactual Reflection Affect Older Adults?***

Ultimately, the exact relationship between “what-if” thinking, age, and perceptions of meaning can only be reconciled through empirical work that directly manipulates counterfactual reflection. We know from Maslow (1968), Erikson (1968), and Ryff and Singer (1996) that acceptance and reconciliation of one’s life story is a key component of healthy aging. To the extent that an individual accepts and comes to grips with the events of his or her past (regardless of whether that past is construed as mostly positive or mostly negative), a greater sense of well-being and meaningfulness will ensue. For example, King and colleagues have shown that while a drive for happiness may compel people to avoid thinking about their past, the ability to explore both lost possible selves and present possible selves is an important sign of healthy development and maturity (King and Hicks 2007). Without acceptance of one’s past, however, a given individual is likely to experience frequent regret and rumination (Torges et al. 2008). One way to prevent such feelings from occurring would be to promote acceptance of the fact that what has occurred in the past will forever be a part of that unchanging past. Theoretically, older adults have a stronger motivation to accept the past than do their younger counterparts. It is conceivable, then, that the closer an individual is to the end of his or her life, the more he or she would *want* to believe that the path life took was to some extent fated. Thus, it is possible that through this fate mechanism, counterfactual reflection could actually produce a greater sense of meaning for older adults than for younger adults. Age, in other words, could moderate the relationship between counterfactual reflection and increased meaningfulness.

### ***Age, Counterfactual Reflection, and Commitment***

Previous work has demonstrated the relationship between counterfactual reflection and commitment (Ersner-Hershfield et al. 2010), but to what extent are such relationships present for older adults? By definition, older individuals have a shorter future in front of them, so it is possible that the notion of being committed to a given entity (e.g., one’s

country) – especially one that will undoubtedly outlast oneself – may not hold great appeal. Why, in other words, would I be inclined to demonstrate commitment toward an entity whose future existence will not affect me? Counterfactual reflection on important entities, then, may actually *lessen* an older adult's commitment to those entities.

Conversely, as one grows older, demonstrating commitment to important entities and groups may actually be psychologically beneficial inasmuch as doing so fosters a sense of control. An elderly person may fear that, after death, her alma mater will not continue to espouse the values and activities that it has during her lifetime. If so, this alumnus might be more inclined to make a donation now so that her former college continues to operate (in the future) in accordance with her values. Future work, thus, should examine how prefactual reflection about what might be may lead to greater – or less – commitment to important groups as people grow older.

## Conclusion

An accumulating body of literature has demonstrated that counterfactual reflection is a psychologically healthy process that facilitates meaning-making and a sense of commitment. But understanding the extent to which such processes apply to adults across the life span is still in need of examination. In this chapter, we have offered a number of promising directions for future research. Future work will hopefully shed greater light on how considering life's consequential moments – and the paths that they helped create – might affect younger and older adults differently.

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