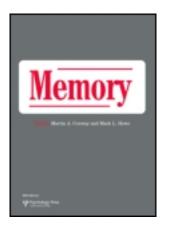
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# Memory

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# Meaning making, adversity, and regulatory flexibility

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# Meaning making, adversity, and regulatory flexibility

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Despite the widely accepted belief that meaning making is essential for mental health following adversity, the available research continues to provide mixed findings: meaning making is sometimes evident, sometimes not, and more frequently than we would expect associated with poor health outcomes. The papers that comprise this special issue of *Memory* put flesh to those bones by approaching the question from a narrative memory perspective. Meaning making, these studies demonstrate, is a multi-faceted phenomenon and whether it is necessary or adaptive depends on which particular form of meaning making is considered and on the context and timing in which it occurs. To situate these insights in a broader framework I consider parallels with the emergent literature on regulatory flexibility and briefly review recent research and theory on that construct as it has been applied in the literatures on coping and emotion regulation. Finally, I close by suggesting a basic framework, informed by the flexibility construct, that might guide future research on meaning making.

Keywords: Flexibility; Narrative; Meaning making; Trauma; Adversity.

The idea that humans are meaning-making creatures is virtually axiomatic in psychology. Indeed the capacity to represent the world symbolically, to reason, and ultimately to create meaning is widely viewed as the fundamental process that makes us human (Baumeister, 1991; Baumeister & Vohs, 2002; Klinger, 1977; Ochs & Capps, 1996). However meaning creation is not simply a feature of human cognition, it is also widely assumed to be an essential component of mental health (Klinger, 1998), and in particular a crucial mechanism in the successful adaptation to aversive life events (Janoff-Bullman, 1992; Silver, Boon, & Stones, 1983).

Yet despite the central role given to meaning making in human psychology, and despite the rich body of theory devoted to the presumed function of meaning making in adjustment, empirical research on these behaviours has been surprisingly limited (Park, 2010). For example, the process and products of creating meaning are commonly assessed using single, self-report questions, such as "Have you searched for or have you found meaning?" Although brief self-report questions are easy to implement, it seems likely that they would fail to capture the complexities and temporal unfolding of the meaning-making process.

These methodological problems are ameliorated to some extent by a growing body of research that seeks to understand the vicissitudes and consequents of people's attempts to construe meaning through analyses of narrative discourse. Although this approach is not without its own limitations, such as the tendency to rely heavily on cross-sectional, retrospective designs, the analysis of narrative data nonetheless offers a rich and in many ways ecologically more valid window on the meaning-making process. Studies that employ narrative methods, for example, afford participants considerable opportunity for reflection and revision and simultaneously provide researchers with expanded opportunities for in depth analyses of meaning variables.

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The papers included in this special issue represent an exciting contribution to this growing body of work. These papers are exciting not only because they employ the narrative approach to great effect and confirm a number of previous findings in the meaning literature; they also offer a number of new and intriguing insights.

## MEANING AND MEANING MAKING ARE NOT ALWAYS EVIDENT

The construction of meaning is assumed to be an essential component of how we adapt to aversive events. Intriguingly, however, the available research has consistently indicated that people do not always search for meaning and do not always find meaning (Park, 2010). Research on potentially traumatic life events has shown, for example, that many, often a majority of, people exposed to such events cope remarkably well (Bonanno, 2004; Bonanno, Westphal, & Mancini, 2011) and are unlikely to engage in extensive meaning making efforts (Wesphal & Bonanno, 2007). Questionnaire studies have reported that surprisingly low percentages of people seek meaning or attempt to make sense of aversive events like bereavement (Bonanno, Wortman, & Nesse, 2004; Davis, Wortman, Lehman, & Silver, 2000) or the experience of surviving cancer (Schroevers, Ranchor, & Sanderman, 2004). The same type of variability is found in reports of meanings made (Park, 2010). Again, in some contexts such as bereavement (Bonanno et al., 2004; Davis et al., 2000) or terrorist attack (Updegraff, Silver, & Holman, 2008), a surprisingly large portion of those sampled report not being able to find any meaning in the event.

It is plausible that the lack of reported meaning-making attempts in these studies resulted from the superficial and simplistic nature of the self-report questionnaires. Importantly, however, the more in-depth probes of narrative analyses offered by the current set of papers also suggest that in some contexts meaning is hard to come by. In their study of abuse narratives, for example, Greenhoot and colleagues (2013 this issue) reported that references to some types of meaning making were rare. Similarly, Sales and colleagues (2013 this issue) and Lilgendahl, McLean, and Mansfield (2013 this issue) found that evidence for narrative markers of self-growth were relatively uncommon in memories for negative or traumatic life events.

# MEANING MAKING IS NOT ALWAYS HEALTHY

The compatible assumption that searching for and finding meaning is necessary for successful adjustment has also been challenged. Although there is clear evidence linking meaning making to positive adjustment, there are also abundant studies showing the opposite (Park, 2010). The rich data provided by the narrative analyses in the current set of papers affirm this surprising pattern, with some studies linking meaning making with negative outcomes. Waters et al. (2013 this issue) found that meaning-making variables coded from trauma narratives were consistently linked with posttraumatic stress symptoms. Sales et al. (2013 this issue) reported that narrative evidence of meaning making in adolescent girls with extensive trauma exposure was consistently linked with increased depression. Although these findings say little about the directionality of these effects, they nonetheless provide further corrective to the often-overstated notion that meaning making is always present and always adaptive. Indeed, in discussing their findings Sales et al. (2013 this issue) offered the sobering conclusion that "for individuals who have experienced challenging lives it might be healthier not to reason about their past lives" (p. 19) and "more adaptive to simply move forward and assume one can change the future rather than to try to make sense of a past that may simply be senseless" (p. 20).

## WHEN MEANING MAKING MIGHT BE ADAPTIVE AND WHEN IT MIGHT NOT

Although all the papers in this special issue were constrained by retrospective designs, the narrative approach used in these studies produced a rich and complex pattern of findings that shed welcome light on the all-important question of when meaning making might be adaptive or maladaptive. Lilgendahl et al. (2013 this issue) found that self-growth in narratives varied across different contexts and different types of events. Banks and Salmon (2013 this issue) found that the association of distress with narrative meaning making when participants described low points in their lives varied depending on whether participants linked these events to their own personality, saw them as central to their identity, or connected the events to personal growth or to the development of a positive characteristic. In a study of narratives about drinking experiences obtained from members of Alcoholics Anonymous (AA), Dunlop and Tracy (2013 this issue) also reported a mixed pattern of results. They also reported the especially intriguing finding that, contrary to the prescriptions of AA, participants whose narratives explicitly linked negative personal attributes to drinking behaviours had poorer mental health. Greenhoot et al. (2013 this issue) also reported mixed results in their study of written abuse narratives and concluded that their "most surprising finding", which contradicted a common assumption in the meaning literature, associated abuse narratives about resolution (e.g., resolve, redemption, or reversal of complications) with greater PTSD and depression.

#### **TOWARDS A BROADER MODEL**

How might we understand this disparate pattern of findings? Although the narrative analyses reported in this special issue illuminated some of circumstances under which meaning making will likely lead to divergent outcomes, whether positive or negative, these findings beg for a wider conceptual framework. One possible framework proposed by Park and Folkman (1997) and later expanded by Park (2010) emphasises the distinction between global meanings, such as beliefs about the self and the world, and situational meanings that refer more proximally to meanings associated with a particular situation or event, such as appraisals of threat or controllability. In simple terms, Park's (2010) model predicts that, when appraisals of specific stressor situations violate global meaning structures and beliefs, distress is experienced and meaning-making processes are instigated to ameliorate that distress. If the situational meaning does not violate global meanings and beliefs, then meaning-making processes are not instigated.

Although Park's (2010) model offers perhaps the most integrative summary of the meaningmaking process to date it nonetheless fails to capture many of the myriad facets of meaning making assessed in the current special issue. To cite just one example, Lilgendahl et al. (2013 this issue) found that subjective theories about the malleability of personality, a global meaning structure, were associated with variations in narrative self-growth. However, using Park's model it is not clear that subjective theories about the malleability of personality would bear any immediate relationship to situational appraisals. Thus we are still left wanting for a more encompassing explanation of some of the more counterintuitive findings reported in the current special issue and for the fact that meaning making sometimes appears to be maladaptive in the precise situations where both clinical wisdom and social theory suggest it should be adaptive.

Clues to how we might expand our understanding of such events comes from a number of insightful observations about various additional factors that inform whether or how successfully meaning making is instigated. For example, the success of talking about stressful events, which is a common form of meaning making, appears to depend in part on how receptive the audience is perceived to be (Kelly & McKillop, 1996; McLean & Mansfield, 2011), whereas the extent of meaning making tends to vary with the compatibility of the meanings sought and the cultural beliefs and expectations in which they occur (Alea & Bluck, 2013 this issue; McLean & Mansfield, 2011). Of relevance is Waters et al.'s (2013 this issue, p. 21) insightful observation that "different event types might require different coping strategies and/or different types of meaning making to successfully resolve psychological distress" and Chen et al.'s (2012) and Styers and Baker-Ward's (2013 this issue) findings that the relationship between meaning, coping, and behaviour tend to vary across age and gender. Finally, we echo Sales et al.'s (2013 this issue) conclusion that despite our best efforts, some situations simply make little sense and provide little opportunity for meaning making, as well as Hobfoll et al.'s (2007) observation that sometimes meaning is to be found not in cognition about meaning but rather in behaviours that are meaningful.

### THE ADAPTIVE VALUE OF FLEXIBILITY

One avenue that potentially integrates these disparate insights and findings is the construct of regulatory flexibility. Theory and research on flexibility has been applied to a number of

domains of self-regulation, most notably in experimental studies of coping (Cheng, 2001, 2003) and emotion regulation (Bonanno, Papa, Lalande, Westphal, & Coifman, 2004; Gupta & Bonanno, 2011; Westphal, Seivert, & Bonanno, 2010). The findings from this research consistently demonstrate that no one behaviour or strategy is always adaptive, and that in some situations the costs of a behaviour or strategy may outweigh its benefits. Summarising the research on flexible coping, for example, Cheng and Cheung (2005) observed that the available evidence indicates that "the predominant use of any type of coping strategy can be debilitating" and rather that "people need to be flexible in the deployment of coping strategies for effective coping with diverse types of situations" (p. 860).

The construct of flexibility is also highly relevant to emotional expression. Although the expression of emotion is generally considered to be essential for mental health, a growing body of evidence points up the importance of emotional suppression or inhibition (e.g., Bonanno, Keltner, Holen, & Horowitz, 1995; Coifman, Bonanno, Ray, & Gross, 2007). Summarising this research, my colleagues and I argued, "whether one expresses or suppresses emotional expression is not as important for adjustment as is the ability to flexibly express or suppress emotional expression as demanded by the situational context" (Bonanno, Papa, et al., 2004, p. 482).

Of particular relevance to the question of meaning making, my colleagues and I recently developed a questionnaire measure, the Perceived Ability to Cope with Trauma (PACT) scale, that assesses various behaviours relevant to flexibility in the specific context of coping with potentially traumatic life events (Bonanno, Pat-Horenczyk, & Noll, 2011). Factor analysis of the PACT revealed a subscale, trauma focus, which included various facets of meaning making, such as remembering the details of the event and reflecting on the meaning of the event. This scale was contrasted by a second scale, forward focus, that included items indicative of distraction, optimism, and actively moving beyond the event. Preliminary research on the PACT showed that overall flexibility, measured as high scores on both scales, tended to predict the best adjustment. However, similar to the research on meaning making, trauma focus was sometimes adaptive and sometimes not. For example, both forward focus and trauma focus predicted reduced trauma symptoms among Israeli students exposed to high levels

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of terrorist violence (Bonanno, Pat-Horenczyk, & Noll, 2011). By contrast, among a group of American students exposed to a range of potentially traumatic events, forward focus was associated with a resilient outcome and trauma focus predicted a more graded pattern of distress and then gradual recovery (Galatzer-Levy, Burton, & Bonanno, 2012). Among bereaved individuals forward focus was associated with reduced grief symptoms, while trauma focus was equally prevalent among those who had relatively few grief symptoms and those who suffered prolonged and extreme grief symptoms, suggesting that trauma focus is less adaptive when grief is prolonged (Burton et al., 2012).

The complex and nuanced view of the meaning generation process suggested by narrative studies argues for a broad kind of flexibility that goes beyond mere sets of behaviours or strategies. Although research on flexibility is nascent, when considered together the various studies on flexibility implicate at least three different sets of processes (Bonanno & Burton, 2012): one set involves appraisals of environmental demands (Cheng & Cheung 2005; Coifman & Bonanno, 2010; Davidson, Jackson, & Kalin, 2000); a second set pertains to the repertoire of possible behavioural responses that might be used to meet those demands (Bonanno, Papa et al., 2004; Cheng, 2001); and a third set involves the ongoing sensitivity to internal and external feedback about the relative success or failure of the behavioural responses as well as the ability to shift away from a behaviour that is clearly not working (Kato, 2012). Recently, Kashdan and Rottenberg (2010) proposed an even broader concept of psychological flexibility that is "reflected in a number of dynamic processes that unfold over time" (p. 2). According to their view these processes may involve adapting to fluctuating situational demands, reconfiguring mental resources, shifting perspectives, and balancing competing desires, needs, and life domains.

Applying these broader notions of flexibility to the narrative study of meaning and meaning making would necessarily require the use of more extensive research designs. Most of the authors of this special issue have pointed up the imperative need for longitudinal research on narratives (e.g., Banks et al.; Chen et al., 2012; Dunlop & Tracy, 2013; Greenhoot et al., 2013; Lilgendahl et al.; Sales et al., 2013; Waters et al.,). Extending this suggestion, it would seem that an ideal avenue to incorporate some of the advantages of the flexibility perspective in future narrative research on meaning and meaning making would be to obtain multiple narratives at different points in time.

Our current understanding of how trauma responses unfold suggests some interesting and testable hypotheses. During the first hours after exposure to traumatic stress, for example, meaning making would seem unlikely. The initial response to trauma is often characterised by intense cognitive and biological variability. Moreover, the surge of glucocorticoids that typically accompanies the experience of intense stress temporarily limits both working memory and retrieval from long-term memory (de Quervain, 2006; de Quervain, Aemi, Schelling, & Roozendaal, 2009), which would no doubt impede meaningmaking efforts. By contrast, the period immediately after the initial trauma response (i.e., from several hours to several days or weeks after the even) would seem an ideal time for meaning making to occur. Typically, both biological and cognitive disorganisation will have abated during this period while social sharing, an important mechanisms by which humans gain information and create meaning, is typically most common (Rimé, 2009). A study of the March 11 terrorist attack in Madrid showed, for example, that social sharing in the first week after the attack predicted greater social integration, growth, and emotional well-being at later assessments (Rimé, Páez, Basabe, & Martinez, 2010). Meaning making may also occur after longer periods of time have passed. However if distress remains elevated, or if the search becomes prolonged, meaning making may evolve into rumination and only further exacerbate distress and obfuscate understanding (Sales et al., 2013 this issue; Waters et al., 2013 this issue). The opposite may occur as well. People may simply forget about important details of distressing or potentially traumatic events (Dekel & Bonanno, in press; LaLande & Bonanno, 2011) or, as Greenhoot et al. (2013 this issue) and others (Femina, Yeager, & Lewis, 1990; Williams, 1994) have observed, no longer consider these events worthy of discussion or reporting.

Many of the narrative studies in this special issue used experimental and quasi-experimental designs (Banks et al.; Chen et al., 2012; Dunlop & Tracy, 2013; Greenhoot et al., 2013; Lilgendahl et al., 2013; Waters et al.). Research on flexibility has demonstrated the usefulness of embedding experimental measures in longitudinal designs as a way of assessing the predictive relationship of flexibility to long-term adjustment (e.g., Bonanno, Papa, et al., 2004). This approach too would seem a fruitful avenue to explore in future narrative research. Pulling these various strands together, it would seem that the combination of longitudinal and experimental approaches would make it possible to measure and catalogue (a) the extent that persons might engage in any particular form of meaning construal at any given time, (b) whether their choice of meaning making depended on how they understood the impinging situational demands and whether particular forms of meaning construal seemed more appropriate or felt more necessary than others, (c) the kinds of cognitive and emotions resources people were capable of using for engaging in and finding meaning, (d) how specific choices about meaning construal might influence ongoing adjustment, (e) whether meaning construal may be more appropriate or more effective at different points across time, and finally (f) whether searching for or finding meaning might be prioritised as more or less important than other facets of the person's experience as the course of their life unfolded.

Although research that embraces this broader approach to flexibility and meaning making will be time-consuming, expensive, and difficult to execute, its promise is considerable. As the research in this special issue of *Memory* has aptly demonstrated, one-dimensional notions of meaning and meaning making are simply no longer viable. Understanding the vicissitudes of these processes necessitates expansion both conceptually and methodologically. The papers of this special issue have taken strides in that direction. There is no choice but to follow suit.

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