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What We Can Learn About Emotion by Talking With the Hadza

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Abstract

Emotions are often thought of as internal mental states centering on individuals' subjective feelings and evaluations. This understanding is consistent with studies of emotion narratives, or the descriptions people give for experienced events that they regard as emotions. Yet these studies, and contemporary psychology more generally, often rely on observations of educated Europeans and European Americans, constraining psychological theory and methods. In this article, we present observations from an inductive, qualitative analysis of interviews conducted with the Hadza, a community of small-scale hunter-gatherers in Tanzania, and juxtapose them with a set of interviews conducted with Americans from North Carolina. Although North Carolina event descriptions largely conformed to the assumptions of eurocentric psychological theory, Hadza descriptions foregrounded action and bodily sensations, the physical environment, immediate needs, and the experiences of social others. These observations suggest that subjective feelings and internal mental states may not be the organizing principle of emotion the world around. Qualitative analysis of emotion narratives from outside of a U.S. (and western) cultural context has the potential to uncover additional diversity in meaning-making, offering a descriptive foundation on which to build a more robust and inclusive science of emotion.

Keywords

emotion, culture, narrative, meaning-making, qualitative methods, emotion theory

How do people think about emotion? Instances of emotion are often understood as internal mental states involving subjective feelings and evaluations (e.g., Clore et al., 1994; for a discussion, see Lambie & Marcel, 2002). These feelings and evaluations—which can be described in terms of affective valence and arousal (Russell, 1980) and appraisal dimensions (e.g., novelty and agency; e.g., Ellsworth & Scherer, 2003)—are considered central features of emotion. Other features of emotion include bodily sensations (e.g., Nummenmaa et al., 2014), such as stomach tension or changes in heart rate; action tendencies (e.g., Frijda et al., 1989), such as smiling or becoming aggressive; and perceptions of the sensory and social environment (e.g., Curtis et al., 2004; Fischer et al., 2003), such as a pungent smell or the presence of other people. Which features are foregrounded in—or even considered part of—emotion varies across cultures (L. F. Barrett et al., 2007; Boiger et al., 2018; Kitayama et al., 2006; Mesquita, 2022). Yet contemporary psychology often anchors on understandings of emotion as experienced by educated Europeans and European Americans (i.e., the European American social science model; Lillard, 1998), consistent with the critique that samples are too often

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drawn from western, educated, industrialized, rich, and democratic (WEIRD) societies (Henrich et al., 2010; see also Arnett, 2009; Trouillot, 2002). In frameworks based on these eurocentric folk understandings, the term "emotion" (or *experience of emotion*) is often treated synonymously with mental experiences that occur within individuals. This does not represent the extent and range of variation in emotion cross-culturally, likely constraining psychological theory and methods. Here, we examine folk understandings of emotion in two cultures, using "experience of emotion" to refer more broadly to instances in which features beyond feelings and evaluations may be foregrounded.

One way of investigating folk understandings of emotion is to look at how people describe the experienced events they regard as instances of emotion (e.g., Davitz, 1969; Scherer et al., 1983; Shaver et al., 1987). People use these descriptions—what we call *emotion narratives*—to make meaning of their experiences (Bruner, 1990) as emotions by situating themselves relative to events, including the contexts in which they occurred, what they felt or thought, what they and others did, and more. By looking for patterns in these meaning-making practices, it is possible to go from individual narratives—the stories they share—to shared *Narrative*—the folk understandings or cultural models they hold about emotion (Dzokoto et al., 2013). Although some prior psychological research has documented cross-cultural differences in emotion narratives (e.g., Scherer et al., 1988), these studies employed deductive, quantitative methods that limit insight into the folk understandings that drive the construction of meaning. Drawing mostly on samples from the cultural west and university students in particular, previous work has produced a Narrative for experiences of emotion that may not be representative of the variety of meaning-making practices around the globe.

In this article, we present observations from an inductive, qualitative analysis of descriptions from the Hadza, a community of small-scale, mixed-subsistence hunter-gatherers residing in Tanzania, East Africa. These descriptions provide a unique perspective on psychological theory by illustrating how eurocentric or western assumptions about emotion are not always met (see also, e.g., Lutz, 1986; Myers, 1979; Potter, 1988). To make this perspective clear, we present Hadza descriptions alongside those from a sample of U.S. students and community members. Our goal with this juxtaposition is neither to normalize Western forms of meaning-making nor to propose that the Hadza community is the most ideal cross-cultural comparison. Rather, it is to highlight the lack of diversity of emotion that is typically reported and to underscore that western forms are often normalized by psychological research; the U.S. descriptions illustrate the phenomenon as it is commonly observed. Qualitative analysis of emotion narratives from outside of a U.S. (and western) cultural context has the potential to discover additional diversity in meaning-making (e.g., H. C. Barrett, 2020; Medin et al., 2017; Rad et al., 2018), offering a descriptive foundation on which to build a more robust and inclusive science of emotion.

Studying Folk Understandings of Emotion

Prior work investigating folk understandings of emotion has come from both psychology and anthropology. These studies have employed a number of methods ranging on degree of structure and standardization, analyzing both quantitative and qualitative data. Among the more structured and standardized methods are those in which researchers have asked participants to list or rate properties for emotion concepts (e.g., Fehr & Russell, 1984), to gauge their prototypicality or to sort them based on similarity (e.g., Lutz, 1982), or to match them to generic scenarios (e.g., Boucher & Brandt, 1981). Although these methods yield quantitative data that can be directly compared, they fail to capture folk understandings as multidimensional and situated phenomena. On the other end of the continuum, ethnographers have created rich, immersive accounts of the observations and experiences encountered during fieldwork in various cultural and geographic settings (e.g., Abu-Lughod, 1986; Briggs, 1970; Rosaldo, 1980). These interpretative syntheses provide insight into the folk understandings active in particular cultural contexts but are not designed with comparison in mind. Interviews and other semi-structured methods of data collection (e.g., Cassaniti & Luhrmann, 2011; Hollan & Wellenkamp, 1994; Ryder et al., 2008) represent a balance between standardization (e.g., property rating) and immersion (e.g., ethnography) and can be used to solicit "experience near" accounts, such as narratives, that can nevertheless be systematically analyzed (Weisman & Luhrmann, 2020).

Narratives are also a useful way to study folk understandings because humans are natural storytellers.[1] Stories are a way of making experience meaningful by organizing it according to a shared set of symbols and communicative practices (Bruner, 1987, 1990; Goffman, 1981; Labov & Waletzky, 1967). For researchers, personal narratives (such as stories) are a means of gaining insight into how people conceptualize themselves and their worlds, providing fertile ground for hypothesis generation and further scientific investigation. The open-ended response format of narratives allows individuals to construe events from their own perspective and selectively highlight which features are most relevant (Bower & Morrow, 1990; Grice, 1975; Ochs &

Capps, 1996; Slobin, 1996). For example, if someone mentions a negative feeling but not stomach tension, it can be inferred that affective features, rather than bodily sensations, are more useful for communicating experience (L. F. Barrett et al., 2007; Choi et al., 2016). Sentence construction and word choice also reveal how individuals understand themselves in relation to an event, such as whether they see themselves and others as agents, victims, or simply bystanders (Bamberg, 1997; Brown & Fish, 1983; Talmy, 2000). Likewise, overall narrative structure reflects how people understood the connection between events (Labov, 1972; Zwaan et al., 1995), with antecedent events understood as causes and subsequent events as consequences (e.g., Ohtsuka & Brewer, 1992; see also Trabasso & van den Broek, 1985).

Narratives also demonstrate cultural beliefs about what is worthwhile to share (McAdams, 2011; Schiffrin, 1996), with conceptual focus further indicated by which details are elaborated or repeated (Dancygier, 2007; Tannen, 1989). For example, a narrative about winning a sports competition signals that these kinds of achievements are valued. If the narrator emphasized their family involvement and support system rather than personal effort, this focus might further suggest an interdependent (vs. independent) view of self (Markus et al., 2006; Markus & Kitayama, 1994; see also Gone et al., 1999). Similarly, a difference in the relative preference for words referring to bodily sensations versus sentiments in the narratives of two cultures suggests corresponding differences in how culture members understand the experience of emotion (Dzokoto et al., 2013). Both narrative content and form have the potential to shed light on individual and cultural processes of meaning-making (for reviews and discussions related to emotion, see Kleres, 2011; Majid, 2012; Ochs & Schieffelin, 1989; Romano, 2014).

Because of this potential, narratives have played an integral role in the psychological study of folk understandings of emotion. In one of the first works of its kind, Davitz (1969) sought to create a "dictionary of emotional meaning," or what people meant when they used emotion words. He began collecting these meanings through a series of interviews in which participants were asked to think of times they had experienced a list of emotions and to describe those events. He regarded these narratives as being "as 'close' as one can come to studying emotional experience" (Davitz, 1969, p. 2) because "it was obvious that the interviewees were talking about material that had direct and immediate psychological significance for them" (Davitz, 1969, p. 6). Davitz used the interviews, together with a set of written narratives, to inductively generate a list of common features of emotion (Davitz, 1969). Starting in 1979, Scherer and colleagues collected written descriptions of emotion-evoking events and coded these narratives for antecedents, subjective feelings, bodily sensations, verbal and nonverbal behaviors, and social and physical context (e.g., Scherer et al., 1983, 1988). These deductively established features were then used to examine the experience of different emotion categories (e.g., anger, sadness, joy) in different cultures. Shaver and colleagues (1987) followed a similar process to examine whether the features mentioned in emotion narratives reflected category prototypes. Together, these early studies helped establish the validity and utility of a narrative approach.

Psychological studies of emotion narratives initially relied on open-ended responses and coding-based analysis strategies (whether deductive or inductive) but soon began to transition to more structured response formats amenable to quantitative analysis. Davitz (1969) ultimately created his dictionary of emotional meaning by presenting his list of features to a new set of participants and asking them to endorse which of these features they associated with a given emotion.[2] Scherer and colleagues likewise began asking participants to recall and describe a series of emotion-evoking events and, with each event in mind, to respond to a series of closed-form questions (e.g., checklists, rating scales) about various features (e.g., Matsumoto et al., 1988; Wallbott & Scherer, 1988). The initial descriptions were often discarded, and only the questionnaire responses were analyzed. The use of emotion narratives as an elicitation technique, rather than a direct source of data, has since been broadly adopted (e.g., Frijda et al., 1989; Oatley & Duncan, 1994; Scherer et al., 2004), and feature lists have become a common means of comparing folk understandings of emotion across languages and cultures (e.g., GRID; e.g., Fontaine et al., 2007). To our knowledge, there are no recent qualitative studies of folk understandings of emotion in psychology.[3]

From narrative to Narrative

Folk understandings of emotion are summaries of histories, relationships, experiences, and responses that represent the values and practices of a given cultural context. We refer to these complex narrative structures as *Narratives* (Bruner, 1987, 1990). These (Narratives) guide the construction of experience by weaving together features such as actions, perceptions, and intentions into an emergent whole—an instance of emotion set against the backdrop of ongoing life (Beatty, 2019; Shweder, 1994, 2004). Features of experience will be centered or sidelined as needed. This framing—what a Narrative includes and what it omits—impacts how emotions are interpreted and how they

are conveyed in discourse (Beatty, 2019; see also Oatley, 1992). Each individual instance of storytelling, each narrative, carries traces of Narrative; how people describe the experience of emotion says something about their typical patterns of meaning-making. Researchers infer Narrative by determining what is common to a collection of narratives.

The Narrative for experiences of emotion that emerged from prior psychological studies is one that centers subjective feelings. Emotions are understood as internal mental states that cannot be directly observed by social others but that nevertheless underlie and can help explain actions. Rather than being directly affected by a situation or an event, people are understood to interpret their experiences according to feelings or evaluations that are person specific (Lillard, 1998; Mesquita, 2001, 2022). A focus on subjective feelings also centers the individual, as experiences of emotion are thought to occur more or less independently of social others (Levenson et al., 1992; Markus & Kitayama, 1994). However, this folk understanding is based on a relatively constrained sample of participants. Most emotion narratives have been gathered from educated Europeans and European Americans (e.g., Frijda et al., 1989; Shaver et al., 1987; for a representative list, see Table S1 in the Supplemental Material available online). Studies that have examined a broader set of narratives—such as those from community members (e.g., Davitz, 1969; Scherer et al., 2004) or participants in Asia, Africa, or South America (e.g., Scherer et al., 1988; Wallbott & Scherer, 1988)—are uncommon.[4] These constrained samples limit the amount of variation that can be observed in how events are made meaningful as emotions. Indeed, studies that have included a greater diversity of cultural samples have found corresponding cross-cultural differences. For example, Scherer and colleagues (1988) found that Japanese university students responded differently from U.S. and European students to questions about the antecedents, involvement of social others, verbal behaviors, and other features of recalled emotion events.

That western, educated samples are overrepresented in contemporary psychological research is not a new idea (e.g., Arnett, 2009; Henrich et al., 2010; Trouillot, 2002). Yet this sampling bias continues to be problematic because the eurocentric folk understandings espoused by these samples are often the building blocks for scientific theories—both as supporting data, as well as the Narratives held or implied by researchers themselves (for a discussion, see Leavitt, 1996; Lillard, 1998; Weisman et al., 2021). Although there is heterogeneity in how scientific theories of emotion consider subjective feeling, this feature is overemphasized on balance (for a discussion, see L. F. Barrett et al., 2007; Lambie & Marcel, 2002; Leavitt, 1996). An understanding of emotions as internal and/or individual is preserved across various descriptions and definitions (as articulated by, e.g., Clore et al., 1994; Harris et al., 2016; Russell, 1991; Wierzbicka, 1999). This folk understanding also informs the methods that are used to study emotion. In the instructions used to solicit narratives, for instance, participants are often reminded that an emotion might not be obvious (e.g., Scherer et al., 1983). Emotion-induction paradigms often ask participants to, alone, recall prior experiences or to immerse themselves in audiovisual stimuli and then to report on aspects of their subjective feeling (e.g., Gross & Levenson, 1995; Lench et al., 2011; Strack et al., 1985; for a discussion, see Mesquita, 2010). Coupled with the use of structured response formats or data annotation schemes based on researchers' intuitions, these methods may result in research that is implicitly oriented toward confirming a western, educated understanding of emotion.

The Hadza

One way to contextualize a potentially biased understanding of emotion is through comparison with perspectives from other cultures around the world. Cross-cultural research is critical for observing diversity in meaning-making (Gendron et al., 2018; see also, e.g., H. C. Barrett, 2022). In the present study, our goal was to investigate folk understandings of emotion, as manifested in the way that people describe their experiences. The Hadza, our focal participant population, are a group of small-scale, mixed-subsistence hunter-gatherers whose culture is well documented through extensive experience working with researchers from the United States and Europe (Blurton Jones, 2016; Marlowe, 2010). They are a minimally religious and egalitarian society that resides in communal residential areas (Apicella, 2018), relocates on the basis of proximity to resources (Berbesque et al., 2016), and has a low degree of market integration (Marlowe, 2010). Hadza diet is mixed subsistence, meaning that it is composed of a base of wild foraged foods (including fruits, tubers, honey, and wild game meat) and supplemented with varying degrees of traded or purchased foods (including corn, beans, rice, and wheat). These characteristics of their culture, among others, meant that we were able to sample a folk understanding of emotion outside of the typical population parameters that characterize most contemporary psychological research while contextualizing our findings with regard to cultural norms and practices.

We initially visited the Hadza community as part of a larger project aimed at conducting cross-cultural studies of emotion perception. These studies were designed to test the evolutionary hypothesis that certain configurations of facial movements (e.g., scowling, gasping,

smiling, and frowning) correspond with particular emotion categories (e.g., anger, fear, happiness, sadness, respectively; Cordaro et al., 2018; Ekman & Cordaro, 2011; Keltner et al., 2019; Shariff & Tracy, 2011). These configurations are thought to be universal and innate because their forms match certain kinds of physiological functions (e.g., vigilance for threats in the external environment, such as predators; Cosmides & Tooby, 2000; Pinker, 1997; Shariff & Tracy, 2011). Some of these physiological functions may be applicable to the present-day Hadza ecological environment, making it a relevant context in which to test the evolutionary hypotheses. This ecological environment is undergoing rapid transition, however, from loss of land, a decline in wild foods, and increased contact with other cultural and social groups (Crittenden et al., 2017; Gibbons, 2018; Pollom et al., 2020). At the time of data collection, for instance, there were fewer than 150 Hadza adults still living in remote camps (Blurton Jones, 2016).

In January 2016, we collected data for two emotion-perception studies and found minimal evidence that the Hadza made meaning of facial configurations in the same way as a sample of western, educated participants from the United States did (Gendron, Hoemann, et al., 2020). Our findings were thus inconsistent with the evolutionary hypothesis, instead replicating studies that have shown cultural variation in emotion perception (e.g., Crivelli et al., 2017; Crivelli, Jarillo, et al., 2016; Crivelli, Russell, et al., 2016; Gendron et al., 2014a, 2014b; for a review, see Gendron et al., 2018). Importantly, we also observed that Hadza participants labeled the facial configurations with language focused less on internal mental states and more on situated action. This motivated us to frame our emotion-perception findings within a broader investigation of Hadza mental life. By doing so, we hoped to document psychological aspects of Hadza culture that may influence how they understand the experience of emotion (Frackowiak et al., 2020). For example, Hadza egalitarian values and cooperative practices (Apicella et al., 2012; Henrich, 2012; Marlowe, 2009) may create a context in which self-focused experience is not as relevant to social functioning. Hadza foraging behaviors and connection with the natural environment (Schnorr et al., 2014) may direct attention to actions and to the external world. Research also suggests that Hadza individuals may be more likely to associate the experience of emotion with bodily sensations such as pain (Herlosky et al., 2020), in comparison with accounts that emphasize cognitive features such as appraisal dimensions at the core of emotion (e.g., Lazarus, 1982; Smith & Ellsworth, 1985). These possibilities encouraged us to approach Hadza folk understanding of emotion using methods that could uncover diversity in meaning-making.

In November 2016, we returned to Northern Tanzania to conduct semistructured interviews of emotion as experienced by Hadza participants. We solicited descriptions of lived experience rather than prescriptive or generic information such as concept definitions (e.g., Lutz, 1988) or responses to preconceived scenarios (e.g., Boucher & Brandt, 1981). In this way, we were able to gain insight into the types of events that populate Hadza daily life, the features of those events that are seen as most relevant, and the positioning of individuals relative to their physical and social environment. To do this, we used a collaborative procedure in which Hadzane- and English-speaking team members worked together to create interview instrumentation and conduct interviews (see the Appendix for method details). We asked participants to tell us about something that had happened to them recently that had made them feel either pleasant or unpleasant. We did not prompt participants for specific emotions (e.g., happiness, anger) because this would have presupposed that Hadza daily life frequently includes those particular experiences (Scherer et al., 2004). We encouraged participants to recount recent experiences to avoid a focus on prototypical life events (e.g., births, deaths) that may have constrained the range of events described or produced highly generic accounts that would not draw on recent autobiographical experiences. After participants told us about their event of choice, we posed a series of follow-up questions asking them to clarify and elaborate on their experience, such as where they were, who they were with, how they felt in their body, and what they were thinking. These questions were intended to facilitate meaning-making by helping participants relive the event and build on the features spontaneously mentioned in the initial description.[5] To conclude each interview, we asked participants to tell us about a time in their lives when they had felt even better or worse than in the previously recounted event, in this way giving them the opportunity to describe seminal or highly salient events.

In conducting and analyzing these interviews, we noticed that the way the Hadza described events differed from what we would find in emotion narratives typical of the psychological literature. We started by coding for traditional features of emotion—based on, for example, common appraisal dimensions (e.g., Ellsworth & Scherer, 2003)—with the aim of quantifying how often these features appeared in Hadza descriptions. However, we found that not only did some codes have low base rates (see Table S3 in the Supplemental Material) but the codes overall failed to adequately capture the nuances of how experiences of emotion were portrayed. We therefore transitioned to a qualitative analysis approach. This analysis was guided by three research questions: What types of events are contained in Hadza descriptions? What aspects of events are foregrounded? What do these tell

us about how Hadza participants make meaning of their experiences? To answer these questions, we followed an iterative review process in which we identified and progressively refined a set of inductive themes (Braun & Clarke, 2006). This approach enabled us to capture the themes that recurred across people in a way that was grounded in the data rather than solely driven by a priori expectations. We first independently read through all the interviews and noted salient observations relevant to the research questions. We then discussed and refined these observations, rereading the transcripts after each pass, until changes between each pass were minimal, suggesting that we had arrived at a stable set of themes (Braun & Clarke, 2006, 2022).

As a comparison for the events and features highlighted by the Hadza descriptions, we consulted an archival set of semistructured interviews conducted with students and community members in North Carolina. These interviews asked participants to recall three types of events: one in which they felt valued or important, one in which they felt offended or not taken seriously, and one in which they felt small or humiliated. Participants also responded to a series of questions to clarify and elaborate on each event. These descriptions, although not originally designed as a comparison sample for the Hadza, allowed us to answer a parallel set of research questions about the events and features highlighted by individuals in North Carolina. We coded the North Carolina interviews following the same inductive process. This approach made it possible for us to juxtapose our observations of the Hadza with a set of observations resembling the folk understandings reflected in much of contemporary psychological research. We outline our key takeaways and provide examples of each in the next section. For each observation about the Hadza, we provide contrastive examples from North Carolina, using this targeted counterpoint to sketch the range of differences in meaning-making between these two cultural contexts (following, e.g., Cassaniti & Luhrmann, 2011). Our goal is to illustrate the plasticity of psychological processes rather than to document fixed descriptions of these cultures or create a catalog of exact discrepancies. As such, we present our findings in the context of discovery rather than as evidence in the context of justification (Popper, 1934; Reichenbach, 1938).

Observations About Hadza Meaning-Making

Descriptions are concrete and practical

One of the first things we noticed is that Hadza participants often recruited specific details about perceptual experience to describe the situation surrounding the event in question. They paid special attention to features of the environment and their relationship to it—details that highlighted sensory aspects (e.g., visual, auditory, proprioceptive) and physically situated the individual. One participant described his suspicion that an elephant was in the area:

> What came to my mind after I heard the sound of trees breaking, it was to be aware of the situation, so I could figure out what was going on ahead of me. So, I was going slowly, snaking through the bush. My mind told me it could be many things in the bush. If it is an eland, then I can hunt it. If it is an elephant, then I need to run away immediately. After that happened, I changed my route. On that way, I saw a dik-dik and killed it and brought it back home.

Another participant described the lead-up to a successful impala hunt:

> It was morning when I woke up and went in the bush. I saw the baobab tree[,] which had a lot of flowers. The impala like to eat the flowers as a food, and I saw a lot of tracks around it. So, I climbed up the tree and waited for the impala. I sat at the top of the baobab, and in the evening, I saw a lot of them coming to the tree to eat the flowers that had fallen down. . . . I waited for the impala to come close to where I was hiding, ready to hunt them. I was hiding by a big branch of the baobab so they could not see me. So, when they are starting to eat, and I started descending slowly and I started to shoot them.

Both participants provide concrete properties of the situation: their location and movement (the bush, climbing), the sights and sounds (tree breaking, tracks on the ground), the play-by-play sequence of events (changing the route home, waiting for the impala). Moreover, they link this sequence using a practical logic (e.g., remain hidden until the impala start to eat so they will be easier to shoot). What was important in each case was whether and how they achieved their goal (or, in the first case, whether another opportunity conveniently presented itself); events were typically followed to their outcome in the description.

North Carolina participants, on other hand, appeared to anchor on details of psychological experience to provide context for their events. For example, one participant described being interrupted while he was doing electrical work on an old building:

> The security guard had come up and he was there and he was making some comments to the ladies about how that, that the ballast was gonna start a fire and that, um, a lot of electrical fires are started from ballast and just kept on running his mouth about how dangerous this situation was when actually it really wasn't as dangerous as he was portraying it to be. So . . . we went for the day, we was doing some more work in the same building and he come up and he wanted to know what my name was, what kind of parts did we use. He [said that he] was filling out a fire report and that anytime there was a fire, that he had to fill out. That according to state law, it was his job to fill out a fire report and, um, he had to have all this information. Well, I told him I said um, "we don't give out that information on a need-to-know basis." Uh, actually he was overstepping his bounds. . . . "If you'll talk to the supervisor, he'll give you that information." He said, "no I need it from you right now." He says, "and by the way, what qualification do you have for doing electrical work on ballast?" So that kind of really got under my skin when he asked me what kind of qualifications. He didn't know I was in charge of the electrical department or that I had an electrical license, or I mean, probably very well overqualified for what we were doing . . . so he just kept on and on and on and . . . that really kind of offended me.

What is important in this case is not specifically what was said or done per se but what was thought or felt ("under the skin" irritation, offense) and how these thoughts and feelings were justified on the basis of the participant's personal history and perspective (earned qualifications, perception of security guard). The meaning of the encounter is constructed through a set of impressions about each person's internal mental state. Often, too, participants did not specify the event outcome—at least not without prompting from the interviewer. The practicalities of an event appeared to be less interesting than its more abstract and subjective reality.

Immediate needs are in focus

Hadza participants' use of sensory detail situates them with respect to their environment, and the play-by-play sequences of events construe the experience as one in progress. These features of Hadza meaning-making have the effect of focusing on current needs and their satisfaction without reference to a psychological past or future. Indeed, many Hadza event descriptions touched on themes of survival, such as encountering dangerous animals (in particular, elephants):

> Yesterday when I went out to find some honey in the bush, I saw some elephants in the middle of the road. I immediately ran around so I was downwind of them and hid myself. . . . I was scared a lot; my eyes were open wide because of the situation. My body and everything were active, so I could figure how I would escape.

Another theme involved obtaining delicious foods (in particular, honey):

> After finding the honey on the top of the baobab tree, I felt good, I felt happy. I felt hungry, and I knew my brother and father were hungry, so I called them. We started to cut down the tree branches to make the pegs to climb to the top of the tree.

Whether the goal was to escape harm, satiate hunger, alleviate sickness, or remove conflict, Hadza participants tended to speak of it as necessary and present.

This sense of immediacy created a sense of being in the present moment. This was clear even when descriptions were not about physical or urgent needs. For example, one woman told us that she enjoys making beads (a typical Hadza pastime) because "it is my heart's decision to make them. . . . What comes to my mind is about the good things that are in my mind, and how I can design different styles of beads." In this way, everyday events were conveyed directly and plainly, as commonly recurring instances that can be taken at face value.

North Carolina participants also described events as they unfolded in the moment but then reflected on their experiences to embellish them with more abstract meaning. Needs, for these participants, had to do with broader, existential issues such as validation and fulfillment. For example, one participant described why he liked doing mission work helping to build houses for others:

> Maybe that's why I jump at opportunities to do something out of the ordinary. Just to maybe add a little bit of excitement to life. So, when you, you do the same thing over and over and over again, you kinda get burnt out on it. You know, I been working in the maintenance department for, for uh, nineteen years, or eighteen years . . . and uh, there are some mornings I don't feel like getting up, 'cause I know I'm gonna go down there and do the same thing I've done every day. But when

> you, you have a little bit of different opportunity to do things differently, maybe it's a little bit more self-motivation.

It is certainly the case that North Carolina participants were describing goals. In the example above, the goal is novelty ("add[ing] a little bit of excitement to life") to stave off boredom ("do[ing] the same thing I've done every day") and increase self-motivation. But—in contrast to the Hadza participants' objectives—these goals were psychological (excitement) rather than physical (finding honey, making beads), remote rather than concrete, and—perhaps, as in the need for novelty expressed above—unable to ever be fully resolved. In this sense as well, the practical outcomes of events were not as salient as the mental outcomes.

Events are punctual

As described above, Hadza participants tended to narrate events using concrete, procedural descriptions and to focus on immediate needs. This narrative style portrayed events as punctual: separable moments that occurred without particular buildup and without lasting aftereffects, even when participants were specifically probed about consequences. This might be expected when the event was impersonal, such as hearing elephant screams: "Nothing happened [after we heard the elephant screams]. We came back to the camp and started cooking and preparing dinner." However, we also noticed this portrayal when events dealt with interpersonal themes, such as conflict among community members: "When we [the community] finished discussing them [the people fighting], we put them in a good line; they continued on with their activities and nothing was happening." Hadza descriptions presented events literally, without tying them to each other, or to the present, with an affective thread.

In this respect, the contrast with North Carolina participants could not be greater. The psychological backdrop and fallout of events were frequently included in descriptions, such that the temporal scope of meaning-making frequently extended over days, months, or even years. For example, one woman described at length her history with a former colleague and a man they had separately dated. This background was used to convey the sense of shock and betrayal she felt when she found out that he was actually married and to justify severing the friendship with her colleague, who had apparently known the whole time: "Oh, she was angry because I found out and then, you know, and then, you know, I never roomed with her anymore, I was just so crushed, and she had put us all in a bad situation." Likewise, one woman described the mixed emotions she felt when leaving her job to start a family as follows:

> I guess it was a sadness of not being able to be with them each day, the contact that I had with people which I thoroughly enjoyed and part of my life, you know, made . . . being happy in your job is very important and I was happy. I couldn't have asked for a better working position at that time. So, the sadness I felt was because I would not be in touch with them on a daily contact. That there were a lot of things that we shared as individuals that I wouldn't have that each day and not knowing what was ahead of me, and once you do have a child and stay home, it was different. It was a big adjustment for me.

Whereas the Hadza event descriptions frequently captured instances, the North Carolina descriptions more often focused on transitions—moments of realization or change that could be made meaningful only in the larger context of antecedent and/or consequent events.

Emotion categories are situated

It is possible that physical context and practical import were central in Hadza interviews because the events being narrated were commonplace. Participants' descriptions may have been different if the events were of greater intensity or personal significance. So at the end of each Hadza interview, we prompted participants to tell us about another event—one in which they had felt even better or worse than in the description they had just offered. We expected that this prompt would be met with prototypical experiences of emotion, such as births, deaths, loves, and milestones. Instead, most Hadza participants replied that regardless of which event they described to us, no other events were more affectively intense. If they described finding honey yesterday, then they had never felt better than when they found honey yesterday. As one man said, after telling us of an encounter with elephants, "When I see other things, I am not scared. The elephant is the only thing that makes me feel that scared." Participants may have not wanted to provide an additional event because they wanted to be done with the interview and assumed we would ask another battery of questions. However, even when we assured participants that all they had to do was name the event, the modal answers did not change. Occasionally, participants would offer an event that was very similar to the one from their main description, such as a different instance in which they found more plentiful or sweeter honey, or a time that they escaped from dangerous animals other than elephants.

This overall response pattern suggested that Hadza participants organized their categories of emotion by specific states of the world. Participants anchored on particular types of events (e.g., escaping dangerous

animals, finding sustenance), holding multiple features constant (e.g., general location, goal) rather than abstracting away from these features to link their main description to another event based on emotion (or valence) alone. As a consequence, it appeared to us that our Hadza participants had emotion categories that were situated—that is, these categories used a situation or goal as their central feature, instead of a subjective feeling.

The North Carolina interviews did not include an analogous question, so we could not make a direct comparison. However, participants were asked to rate the strength of the given experience of emotion in comparison with other similar experiences; this request also required participants to abstract away from a particular instance and contextualize it within others of the same category. The North Carolina participants responded readily to this prompt. One man, recounting how he was once accused of sexual harassment, described his experience as follows:

> It was stronger than all but one. It was nearly the strongest. [The strongest experience was when] I got engaged to a woman and found out that she married someone else when she went back home but she hadn't told me.

In general, the North Carolina participants pulled up particular instances from their past with ease. Although some participants could not produce one or two of the requested events—especially the negative ones—some had multiple ideas for what to tell in response to each prompt. Event descriptions also evidenced a diversity of words for emotions (see below for an example) and/or presented the experience of a given emotion from multiple perspectives—as when the participant enumerates the targets of her anger when she realized her friend had let her date a married man:

> I mean I was angry . . . I was mad with her, I was mad with him because he had asked me out, and I had gone out with him and a lot of times we'd go out to dinner . . . I mean, we just all go together and I thought, you know what, because they knew about, you know, I'm a bad person.

Emotion categories for these participants, then, appeared to be populated with heterogeneous exemplars and fluidly integrated in the construction of both ordinary and exceptional experiences.

Behaviors are related to the event

In the Hadza interviews, we observed that events were guided by a practical logic of how to best meet situation-specific needs and goals. This logic was particularly evident in how participants' actions or behaviors were related to the exigencies of the events themselves rather than any emotion they may have reported feeling. For example, on seeing elephants close to camp, one man described "shouting until [his] voice was hoarse because [he] was helping everyone to escape to the mountain." Instead of celebrating when he found honey, another man said he simply "wrapped a shuka [cloth] around [his] head to prevent the honeybees from stinging."

Verbal behaviors, such as disclosures, and mental processes, such as thoughts, also frequently had a pragmatic relationship with the event in question. When we asked him whether he would tell anyone else about the honey he found, one Hadza man responded that, "It is not good to tell anyone else, because when I tell them about that they will all go in the bush and collect the honey. Then there will be no more honey because everyone has collected it all." Similarly, when we asked one man for his thoughts on finding that his hand ax (one of the few tools the Hadza own) had been stolen, he said, "I was thinking that maybe I can find some help, find some money, and go to buy a new one. This is what I am thinking a lot." Here, as before, the primary concern was ensuring that necessary resources were available so that physical needs may be met.

In the North Carolina interviews, behaviors of all kinds were described as resulting from subjective feelings and evaluations. For example, when we asked him what he wanted to do when his father had been unsupportive of a recent professional accomplishment, one man responded as follows:

> I wanted to leave. . . . It was like my bubble had been busted. You know I almost felt like, I almost cried inside or something and like it was just, you know, and I think I didn't stay long after that. I had made a special trip over there . . . and . . . I didn't get the reaction from him that I thought I was gonna get.

And another remembered what he and his wife had done when their sons gave them flowers at church for their anniversary: "Well, [we] smiled a lot. And, you know, we talked to everybody. . . . And, of course, my wife when she got home of course had to tell, call her mother and father." As in these examples, North Carolina participants mentioned actions and action tendencies, including nonverbal expression and social sharing. The subjective feeling, as the driving force of the event description, was typically construed as the cause.

Bodily experience is emphasized

The events the Hadza told us about were concrete, in the moment, and centered on everyday situations and goals. A logical concomitant of this type of event is that it is organized by actions rather than internal mental states. It follows, then, that we also observed a tendency for the Hadza to emphasize sensations experienced in the body. This tendency is nicely illustrated by a participant recalling a time when he encountered an elephant in the bush:

> What happened to my body, it was too hot because of that situation. There was pressure coming out through me. I feel pain in my chest for the situation. Elephants are dangerous animals, if they see me they are going to kill me. I am failing to run and I am weak. My chest feels like it has a fever, like there is something inside the chest is pounding. My chest is tightening because I was running a lot. I was breathing very fast.

Another good illustration is provided by a participant describing what happened after he found a large amount of honey:

> My body, starting from the top of my head to my hands, was in so much pain because I had been stung by the bees. And also, I was feeling good when I filled up some of my buckets, and I saw some happiness. After that, and I had collected everything, I thought about the water—that I must go and drink some water. Because I feel happy in my heart.

These sensations were not necessarily directly associated with subjective feelings. For example, although the second participant does link drinking water with happiness in his heart, he also describes the co-occurring pain of being stung by bees. In this way, sensations were used to ground the event as a whole by providing access to what the participant was doing or physically feeling. Further, these sensations were often used to underscore the climax or central action of the event and in this way served to bring the listener into the story.

In contrast, the North Carolina interviews frequently emphasized mental experience—affective or cognitive aspects of events. These aspects were often referred to using words for emotions but were also captured by a reliance on paraphrased dialogue or internal monologue. For example, one participant recalled how she felt after causing a car accident:

> I felt really small, at the time, and humiliated, and you know, everybody was looking at me like I am. . . . I mean, it was my fault, you know, but people didn't know me, and they were just acting like I was the dumb blonde. . . . It was not good. . . . Like, I felt like, "this isn't happening," and then I felt horrible, and I was terrified to get these people injured, um, I felt like, worthless and stupid. I was like, "How did I do that?" You know, I just . . . I felt horrible!

In this quote alone, there are six different words used to refer to subjective feeling (small, humiliated, horrible, terrified, worthless, stupid). There are also two instances of self-talk that convey the participant's disbelief and revulsion at her own actions, leading to the crux of the event description. Thoughts, rather than sensations accompanying action, were at the core of the event.

Shared experience is highlighted

Even though Hadza participants were the protagonists in their own event descriptions, we also got the sense that they placed more emphasis on shared experience and group needs rather than individual identity. When asked for a recent negative experience, for example, one young man told us how unpleasant it was to see other people fight: "What I saw that made me feel bad was the people who were fighting. I didn't want to see them fighting. . . . This was something that makes me feel very bad." When asked for a positive experience, another young man told us of his joy when receiving meat from a community member:

> I felt so happy because [he] killed the meat, so everybody even children will go get the meat. They will cook it and then we can share, we will eat in the camp. When the people cook the meat in their house, they can eat with their family.

These experiences, as others that we heard, did convey the participants' feelings. Yet they also seemed pointed away from the ego and toward others, in a way that might not be expected based on eurocentric folk understandings of emotion. This sense of collectivity featured even in descriptions of personal triumph:

> That day I was laughing so much because I had never killed an impala before. My whole life I had been trying to kill impala. This was a very lucky day for me. . . . That I day I loved it so much because I knew my kids would be satisfied.

Here, the participant downplays the individual effort that led to his achievement by ascribing it first to luck, and then redirecting to focus on his children.

In direct contrast, a triumphal event is narrated by a North Carolina participant as follows:

> I played for our varsity basketball team, and we were playing one of our big rivals, and I ended up scoring, I don't know, like 16 points in the last quarter, which basically won the game for us. I received a lot of praise for that, and then the next day in the newspaper it had a big article write-up about me, and the picture, and so, that was my . . . I felt praised, kind of an ego-trip. . . . I knew I would get a lot of recognition that night and have a lot of fun.

The emphasis here is on the participant's own role in the victory and the attention that he would receive (and enjoy receiving). What is salient is the value of the experience for the individual and his self-worth. This use of events to highlight participants' sense of self was common in the North Carolina interviews. For example, one man describes his mission work as follows:

> We had a good spirit about it, 'cause we knew we were working together for a, a good common cause and everything. And, you know, I, me, that made me feel important, you know, just, there wasn't nobody there saying good job, or congratulating me or nothing, but you just, you felt like you were doing something worthy.

The participant is engaged in service for others yet focuses on the personal benefit he receives from his altruism. Whereas in the Hadza interviews events are single instances firmly rooted in sensory and bodily context, in the North Carolina interviews meaning-making is turned inward to find inflection points in the larger psychological arc of the self.

Discussion

Emotion narratives have provided a backbone for research on emotion because they represent people's understanding of emotion. To study how people understand things is to study meaning, and narratives are meaning-making in action (Bruner, 1990). In a study of emotion centered on meaning, however, the people in question matter. Cultural practices and personal histories are deeply embedded in meaning-making; one person's narrative does not, and cannot, stand for all (Bruner, 1987; Geertz, 1973). Most of contemporary psychological research on emotion started from the narratives of university students in the cultural west (e.g., Frijda et al., 1989; Shaver et al., 1987; see also Henrich et al., 2010; Lutz, 1986). Because these narratives were constructed within the same sociocultural context as the researchers who studied them, the assumptions they made and the underlying Narrative—how they positioned individuals in relation to experiences and themselves—would not have been obvious (Bruner, 1990). Theory and methods based on this Narrative, then, are limited in their ability to discover diversity in how and whether events are made meaningful as emotion. Such diversity is necessary for research on emotion to say something about how experience is understood both within and across cultural boundaries.

In the present article, we described a set of key observations about folk understandings of emotion derived from event descriptions of Hadza hunter-gatherers in Tanzania. We juxtaposed these observations with those drawn from a sample of Americans from North Carolina (Fig. 1), allowing us to compare cultural contexts that differ on multiple dimensions, including economic system and environmental conditions, familial and social structure, and extent of formal education. While the Hadza descriptions deviated from the assumptions made by psychological theory, the North Carolina descriptions largely conformed. North Carolina descriptions portrayed the mental states of individuals, whereas Hadza descriptions foregrounded actions (and accompanying bodily sensations) involving social others. North Carolina descriptions anchored on psychological context and abstract goals that extended over time; Hadza descriptions, however, focused on the sensory environment and immediate needs associated with specific moments. North Carolina descriptions centered subjective feeling as the cause of behavior and the link between multiple variable instances. In contrast, Hadza descriptions worked outward from situated events as the motivation for behavior and categories of experience. These observations suggest that subjective feelings, specifically, and internal mental states, more generally, may not be the organizing principle of emotion the world around.

Emotions are more than internal mental states

Psychologists commonly assume that subjective feeling is central to the experience of emotion. This assumption is based on folk understandings of educated Europeans and European Americans, who comprise most psychological samples, and researchers (Leavitt, 1996; Lillard, 1998). According to these understandings, subjective feeling represents the evaluation of one's personal relationship to the current circumstances (L. F. Barrett, 2006; Russell, 2003; Schwarz & Clore, 1983). Because this evaluation is believed to guide decision-making and action selection, subjective feeling is seen as the cause of

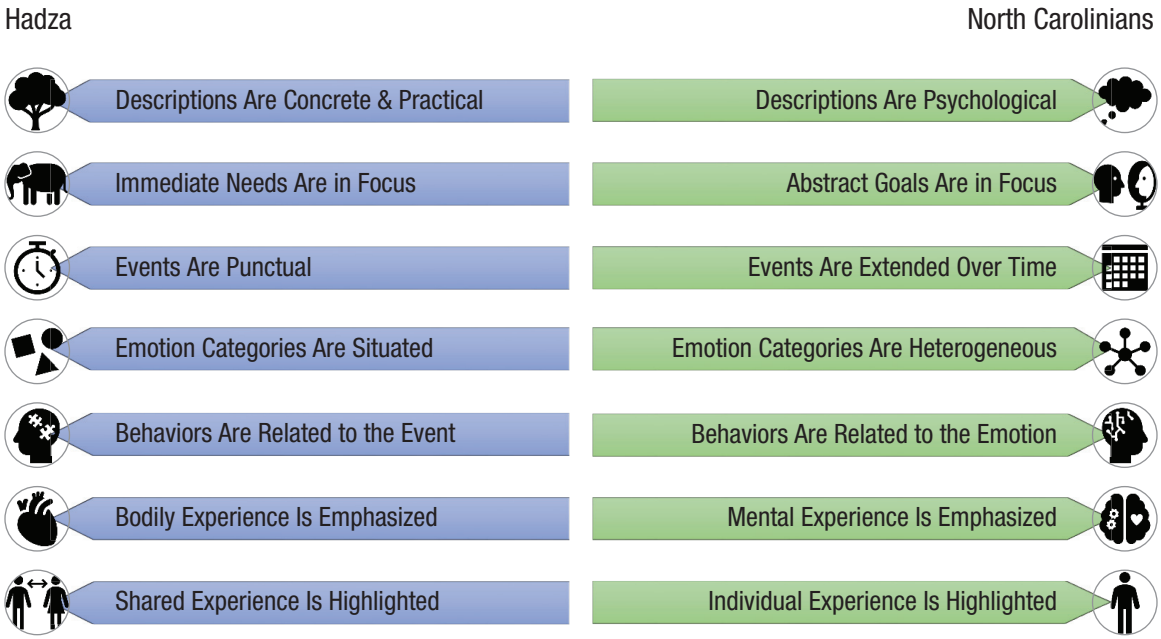

Fig. 1. Summary of themes emerging from the event descriptions of Hadza (left) and North Carolinian (right) participants. Each theme indicates a tendency or trend observed in each sample, as indicated by the arrows pointed left and right.

particular outcomes (Böhm & Pfister, 2015; Harris et al., 2016; Ong et al., 2016). For example, a feeling of frustration when encountering traffic on the way to an important appointment may provide the reason for a terse comment. Attributing this response to the emotion, rather than the situation, gives it explanatory value. Consequently, emotions are directly relevant to both the self and social others because they can be used to explain and organize behavior (L. F. Barrett et al., 2007; Ong et al., 2016; Saxe & Houlihan, 2017). The recipient of the terse comment may infer that the speaker is angry and may use this inference to adjust their own response accordingly. In this way, experienced (and inferred) emotions become a means of both understanding the self and structuring interactions with others. This conclusion is supported by our observations from the North Carolina event descriptions, in which participants attended to their own and others' thoughts and feelings and used these to make meaning of experiences.

The central, explanatory role of subjective feelings and other internal mental states in folk understandings of emotion may not extend to all cultural contexts (e.g., Lutz, 1986; Potter, 1988; for a review and discussion, see Lillard, 1998; Mesquita, 2022). Hadza descriptions illustrated how events themselves—that is, the types of situations encountered—can be imbued with informational value. For instance, Hadza participants often described running away from an elephant because of the inherent danger more than from a feeling of fear. Internal mental states were also not always offered as way of understanding other people's actions. For example, if people were fighting, or if someone stole something, this was seen as a practical issue to be resolved rather than an opportunity to psychologize. Stated another way, mental state inference did not appear to play as central of a role for the Hadza participants as it did for the U.S. participants. This possibility is consistent with what we and others have previously observed. When we presented Hadza participants with configurations of facial movements, they were more likely to describe these configurations as behaviors (e.g., "looking") rather than expressions of emotion (e.g., "fearful"; Gendron, Hoemann, et al., 2020). This form of meaning-making, referred to as *action identification* (e.g., Kozak et al., 2006), emphasizes situated function—what a person is doing and/or how they are doing it but not necessarily with an inference of why.[6] Prior research has likewise shown that when asked to assign punishment for a transgression, Hadza participants are less likely to use provided information about intent as a mental cause of behavior (H. C. Barrett et al., 2016). The tendency toward action identification based on presumably emotional cues has also been observed in other small-scale societies, such as the Himba of Namibia (Gendron et al., 2014a, 2014b) and the Trobrianders of Papua New Guinea (Crivelli et al., 2017).

It is important to note that we do not interpret these data as suggesting that concepts for "emotion" are absent from Hadza folk understandings of mental life.

Rather, our observations suggest that Hadza concepts for emotion are differently constituted (i.e., their features differ) and differently applied when compared with the emotion concepts of U.S. participants in this study. This conclusion fits with prior psychological and anthropological work suggesting that concepts for emotion vary across cultures and exhibit degrees of relevance for organizing intra- and interpersonal life (for reviews and discussion, see L. F. Barrett, 2017a; Beatty, 2019; Leavitt, 1996; Lillard, 1998; Russell, 1991). For example, the Chewong people of Malaysia have far fewer words for emotion (some researchers suggest under 10; Howell, 1981) than other populations, such as the Newar of Nepal (Parish, 1991). There are also differences in terms of how emotion concepts are articulated. Whereas Tahitian participants understood experiences such as grief as possession by departed spirits instead of "emotionalizing" them as sadness (Levy, 1973; Shweder, 1994), Javanese society has been described as intricately reliant on emotion concepts, whereby a lack of emotional know-how is often seen as being "not yet Javanese" (Beatty, 2005, p. 33). The Hadza contribute to the canon of cross-cultural data, and appear to be a median society. Hadza participants produced a comparatively limited number of words for emotions, consistent with a smaller affective lexicon in the Hadzane language (Gendron, Hoemann, et al., 2020; Miller et al., 2012). There was also a tendency to focus on situated action. However, Hadza participants could be spontaneously attentive to their own and others' subjective feelings—as seen in the example quotes, they would sometimes describe being afraid of elephants or pleased that their children would soon eat meat. These observations are consistent with previous research on how Hadza describe configurations of facial movement (Gendron, Hoemann, et al., 2020) and interpret bodily sensations and health-relevant behaviors (Herlosky et al., 2020).

Whether and to what degree Hadza experiences of emotion differ from those of North Carolinians remains an open question. In the present study, we used event descriptions to examine not "what emotion is" but "how people understand it to be." Still, we can consider what our observations about folk understandings might mean for phenomenology (e.g., the associated feelings, bodily sensations, behavioral tendencies). For example, there is evidence that concepts for emotion, as represented in language, help shape the perception and experience of emotion (e.g., L. F. Barrett, 2017b; Gendron et al., 2012; Lindquist, 2017; Russell, 1991). As such, it is possible that our differences in narrative meaning-making correspond to differences in the experience of emotion itself (Leavitt, 1996; Potter, 1988). Because people cannot attend to all features of experience at once, by design some are foregrounded, backgrounded, or filtered out on the basis of the contextual and historical relevance (L. F. Barrett, 2017b; Gopnik, 2009; Hoemann et al., 2017). Culture is part of that context and history. Over time, cultural models or scripts, as folk understandings, may come to shape the phenomenology of emotion as it is experienced by the individual, and these experiences, in turn, reinforce folk understandings (L. F. Barrett, 2017b; Gendron, Mesquita, & Barrett, 2020; Lambie & Marcel, 2002; Lillard, 1998). For the Hadza, our observations suggest that differences in experience may be of several types. It may be that the Hadza experience emotion more (or more often) as a property of the world rather than as a property of the self (e.g., "the elephant is dangerous" rather than "I am afraid"; Lambie & Marcel, 2002). In addition, Hadza participants may use a different set of emotion categories to construct experience (L. F. Barrett, 2006; Lambie & Marcel, 2002; Mesquita & Boiger, 2014), forming these around specific situations or goals rather than subjective feelings. The picture these possibilities paint is of an attenuated role for categories of self-focused experience in Hadza mental life, consistent with prior anthropological research attesting to their egalitarian values and cooperative practices (Apicella et al., 2012; Henrich, 2012; Marlowe, 2009).

Cultural differences in folk understandings

By illustrating broad contrasts between Hadza and North Carolina event descriptions, the present study joins prior research in suggesting that folk understandings of emotion vary by culture (e.g., L. F. Barrett, 2017b; L. F. Barrett et al., 2007; Kitayama et al., 2000; Pavlenko, 2006). In the following paragraphs, we discuss connections between our findings and the existing literature. In comparing the Hadza with work in other non-western cultural contexts, we do not mean to imply that these cultures are the same. Indeed, we also point out where comparisons between the Hadza and other cultural contexts are more limited.

One apparent cultural difference is the relative emphasis given to bodily versus mental experience (e.g., Chentsova-Dutton et al., 2020; Dzokoto, 2010; Dzokoto et al., 2013). We observed that Hadza participants tended to ground their event descriptions with behaviors and sensations, whereas North Carolina participants built their descriptions around thoughts and feelings. This observation is consistent with the findings of Pavlenko (2002), who asked Russian and U.S. participants to narrate the experiences of emotion portrayed in a dramatic video. Whereas U.S. participants presented emotions as mental experiences, Russian participants focused more

on embodied aspects (Wierzbicka, 1998, 1999). The emphasis on the body in non-western cultural contexts has been further documented in cross-cultural studies of mental health (e.g., Kirmayer, 1984a, 1984b, 1989; Kleinman & Good, 1985; Ryder et al., 2008). For example, Kleinman (1980) noted that Chinese people described experiences of emotion as more somatic than did middle-class European Americans.[7] More recently, Choi and colleagues (2016) found that somatic words were perceived as a more effective means of communicating distress among Korean than among U.S. participants. These differences in description reflect culturally shaped patterns of attention to features of experience (for a discussion, see Csordas, 1993; Dzokoto, 2010), with possible consequences for social functioning and well-being (Choi et al., 2016). Although the Hadza descriptions evidenced similar differences, their relationship to communicative practices and understandings of mental health remains to be seen.

Another way that cultures differ is the relative emphasis given to shared versus individual aspects of emotion. Compared with North Carolina participants, who centered almost exclusively on their own individual subjective (i.e., internal) perspective, Hadza participants more often referred to collectively accessible (i.e., external) details and highlighted how events might be perceived or experienced by others. In addition to the observations above, Kleinman (1980) noted that Chinese people brought up the interpersonal effects of emotion more so than European Americans and that Chinese experiences were also more rooted in the situation (see also Potter, 1988; Ryder et al., 2008). Similarly, Mesquita (2001) compared descriptions of experience from collectivist (Surinamese, Turkish) and individualist (Dutch) participants. Whereas Dutch participants highlighted subjective feelings rather than social or objective consequences and framed emotion in terms of its importance for participants' own standards, goals, and subjectivities (i.e., as inherently private experiences that "reflect . . . the inner world of the individual"; Mesquita, 2001, p. 73), Surinamese and Turkish participants described the meaning of situations as given or obvious and grounded emotions in assessments of social worth or self-other relationships (see also Semin et al., 2002). These differences are broadly consistent with the present observations; Hadza participants described situated experiences with obvious meaning, although they appeared to focus on others' experiences rather than assessments of their own social worth. More generally, these differences reflect how cultural models of interpersonal relationships influence folk understandings of emotion (e.g., Markus & Kitayama, 1991).

Studies of autobiographical memory document similar cross-cultural differences in narrative form and content. Our observations of the Hadza and North Carolina participants are particularly reminiscent of work by Wang and colleagues comparing the autobiographical memories of Chinese and European American participants. Memories differed according to the type of events recalled, the specific aspects in focus, and how narrators described themselves. European American children and adults tended to provide personal experiences and exceptional events. Chinese children and adults, by contrast, provided social experiences and routine events. European American memories were more specific to the individual, focusing on the participant and their emotions, whereas the Chinese memories anchored on general knowledge and focused on interactions with social others (Han et al., 1998; Wang, 2001, 2004, 2008; Wang & Conway, 2004). Finally, European American participants typically described themselves in terms of their independent, abstract, and internal properties, whereas Chinese participants referred to characteristics that were interdependent, situated, and observable (Wang, 2001, 2004). In the present study, participants were able to describe events of their choice rather than prompted for specific (types of) autobiographical memories. Even so, both sets of findings underscore the fundamental disconnect between common assumptions about the experience of emotion and how it is understood across cultural boundaries.

Building on their overlap with studies of autobiographical memory, the present observations provide indirect evidence of how Hadza individuals understand themselves. Narratives require a narrator: Telling stories about recent or past events provides an opportunity to make meaning of the experience in relation to the experiencer (Bruner, 1987, 1990; McAdams, 2011). It has previously been argued that autobiographical memory and the self are interconnected meaning systems that are dynamic, multilayered, and profoundly cultural (e.g., Wang & Brockmeier, 2002). In the cultural west ("the culture of autobiography"; Folkenflik, 1993), the ego is foregrounded—events are remembered "as if [they] were a drama in which the protagonist is the focus of the plot and determines the storylines" (Wang & Brockmeier, 2002, pp. 47–48). It is not a stretch to extend this idea to folk understandings of emotion, as cultural constructions of emotion rely on cultural constructions of the self (Lambie & Marcel, 2002). In western, educated cultural contexts, emotionality is a core part of personhood and personality: Typical experiences of emotion are evidence of people's temperaments and, ultimately, subjectivities (e.g., Arnold, 1960;

Luhrmann, 2006; Myers, 1979; Singer & Salovey, 2010). We saw this in the North Carolina event descriptions, where instances of emotion were used to scaffold, justify, or illustrate individuals' understanding of their relationship to the world at large. In the Hadza descriptions, however, we found an ego that was more often backgrounded, embedded in social and natural contexts. This observation is consistent with evidence that cultures vary in contextualism, or the tendency to understand the self and others in terms of relational context (Owe et al., 2013).

In linking folk understandings of emotion with mental health, social relationships, memory, and the self, we hope to have illustrated that the present observations have broader implications for the processes by which people engage with the world around them. Cultural differences in the nature, status, and value of features of experience are not limited to emotion but extend to other concepts of mental life. For example, a recent study of adults and children in five diverse cultures found variation in how participants distinguished between bodily sensations, emotions, and cognitive processes. Although adults at every site distinguished in one way or another between bodily sensations and cognitions, emotions were represented differently—sometimes as part of the mind, sometimes as part of the body, and sometimes (as in the United States) as a separate factor (Weisman et al., 2021). Other work in anthropology has shown that emotions are less distinguished from spiritual and moral concerns outside of western cultural contexts (e.g., Thailand; Cassaniti, 2015; Cassaniti & Luhrmann, 2011). These differences in concepts for mental life have been summarized, in both anthropology and psychology, within ethnopsychologies or models of the mind. Dimensions of these models include subjectivity, or the person-specific nature of experience, and interiority, or the felt importance of inner intention and feeling (Lillard, 1998; Luhrmann, 2012). That these dimensions show some resemblance to our key observations about Hadza and North Carolina event descriptions, then, comes as no surprise. Folk understandings of emotion are one of many entry points into larger discussions about how we understand each other and ourselves.

Considerations to interpretation

There are several relevant considerations to note when interpreting the present observations. First, there is the question of whether semistructured interviews are an appropriate method for studying folk understandings of emotion. Interview data are the backbone of much qualitative research in the social sciences (Campbell et al., 2013), and prior research has used interviews to investigate folk understandings of emotion (e.g., Hollan & Wellenkamp, 1994) as well as related experiential and psychological concepts (e.g., D'Andrade, 1987; Ryder et al., 2008). Semistructured interviews, such as the ones reported here, are in many ways like the property listing tasks that psychologists commonly use to study concepts (e.g., Fehr & Russell, 1984), supporting their use for this purpose. Yet the open-ended narratives produced in interviews can reveal more about participants' understandings than more structured response formats; for example, Ryder and colleagues (2008) found that Chinese participants reported more somatic symptoms of depression than European Canadians but did not observe this difference using symptom checklists. Of course, the nature of interview prompts also influences the responses received. In prior field studies, researchers have used interviews to elicit definitions or descriptions of emotion concepts (e.g., Lutz, 1988; Menon & Shweder, 1994).[8] In the present study, we mitigated this concern by asking participants to tell us about moments of their everyday lived experiences rather than schematic, decontextualized descriptions.

Second, it could be that interview structure and requirements for participation are more familiar to U.S. culture members than to the Hadza, and this differential familiarity could have influenced what we observed. Hadza participants may have been less comfortable sharing stories with cultural outsiders or may have chosen to share events that were more straightforward to describe (e.g., finding honey) rather than those with complex personal backstories (e.g., the betrayal of a long-time friend). Although our method may have been more fluid in one sample than in the other (Csordas et al., 2010), this level of standardization across field sites allowed us to make more direct comparisons (Weisman & Luhrmann, 2020). Moreover, because of prior scientific and journalistic contact, the Hadza are more familiar with U.S.-style interviewing than may be assumed. In fact, the Hadza community has nearly 100 years of experience with interviews (see history of interactions with government representatives, aid organizations, researchers, and media in Blurton Jones, 2016) and respond meaningfully to direct questions about their psychological lives. Prior research has studied emotion-related phenomena with Hadza participants (e.g., H. C. Barrett et al., 2016; Gendron, Hoemann, et al., 2020; Herlosky et al., 2020; Hoemann et al., 2019). Herlosky et al. (2020) successfully conducted semistructured interviews about physical and mental distress before and after childbirth. Further, we adopted an inclusive approach to interviewing in which members of the Hadza community acted as our Hadzane interviewers (and coauthors) and were therefore equipped to understand and convey the explanations of behavior

that were shared with them. We view this as a holistic, culturally appropriate, and community-centered method of narrative data collection (for a discussion, see Broesch et al., 2020).

A related possibility is that by prompting participants for event descriptions based on subjective feeling, the interview may have embedded cultural differences in the language and concepts for emotion (and affective experience in general). We prompted on the basis of feeling to maintain similarity with prior studies of emotion narrative (e.g., Davitz, 1969). In doing this, we assumed that the Hadza have a folk understanding of emotion that includes this feature of experience. Our approach would be concerning if this were not the case. The evidence to date, including the present study, suggests otherwise: As reviewed above, Hadza participants spontaneously used affect and emotion language to describe their own and others' experience. At the same time, Hadza participants did not focus as heavily on subjective feeling as North Carolina participants did, even when prompted specifically about it. That these concepts or features are used less often or in different contexts does not mean that they are unavailable (Lillard, 1998; following Ochs, 1988; see also Norenzayan & Heine, 2005). As an analogy, Ghanaians attend more to the temperature of their body to scan for fever, potentially because of the endemic presence of malaria in this region (Chentsova-Dutton, 2019; see also Dzokoto, 2010; Dzokoto et al., 2013). This implies that body temperature is a more salient feature of experience in Ghanaian culture but does not mean that researchers cannot ask people in cultural contexts that are less sensitive to these differences (e.g., the United States) about changes in body temperature. Asking the Hadza to describe subjective feeling provides insight into its role in their folk understanding of emotion, even if it is a noncentral feature.

Another related possibility is that the variations we observed between the Hadza and North Carolina event descriptions were due to differences in the respective interview prompts and follow-up questions. For example, Hadza participants may have offered punctual descriptions that focused on immediate needs because we asked them for recent events associated with more global affect (e.g., "Can you tell us a story about something that happened to you recently that made you feel pleasant?"). On other hand, North Carolina participants may have offered descriptions that centered themselves and specific ways of feeling because these aspects were highlighted in the prompt (e.g., "Can you tell me about a time when something happened that made you feel extremely valued or important?"). The North Carolina prompt implies a more complex set of personal and relational circumstances, whereas the Hadza prompt can in principle be answered with a simple, concrete event. Although it is possible—and indeed likely—that the interview protocol influenced the content and format of the responses, this would not seem to account for everything we observed. When we provided Hadza participants with the opportunity to tell us about a second, more distant and intense or significant event, we still did not receive responses like the North Carolina descriptions. Parallelism with previous findings (e.g., Chentsova-Dutton et al., 2020; Gendron et al., 2018; Mesquita, 2001; Wang & Conway, 2004) gives further weight and depth to our observations. The existence of similar cultural differences across several experiential domains (e.g., perception, health, emotion, memory) runs counter to the idea that we would have gotten the same answers if only we had asked the same questions.

To contextualize our findings from the Hadza, future research is needed that brings anthropological and sociolinguistic principles and methods to bear in setting forms of narrative against the tapestry of lived experience. Our approach in the present study—limited participation in or observation of Hadza daily life, semistructured interview prompts, et cetera—constrains the types of conclusions we can draw about the mapping between events' description and their unfolding in context and between persons. Interviews are useful for capturing a snapshot of folk understandings, but more depth is needed to fully describe emotion as an embodied, embedded, and emergent phenomenon (Beatty, 2013, 2019). More time in the field and a more detailed examination of cultural idioms and discursive practices may yield a clearer picture of how Hadza participants understand mental life. For example, future research can describe Hadza ways of storytelling: who gets to talk, which events are considered worthy, and what is said versus left to inference or general understanding (e.g., Hall, 1976). These discursive practices likely vary in important ways from those of educated Europeans and European Americans, as they are deeply rooted in cultural ways of being and shape cultural patterns of attention. Future research can also provide a more naturalistic sampling and diachronic analysis of the personal and relational histories that, situated in the physical environment, are the substrate of emotion (Beatty, 2010). The path forward is blazed with stories of what people say and do, and by implication think and feel, as they go about daily life (e.g., Abu-Lughod, 1986; Briggs, 1970; Niehaus, 2012; Staples, 2014; for a discussion, see Beatty, 2019; Leavitt, 1996; Oatley, 1992).

Finally, we acknowledge our active participation in the interpretation of these data. Another research group may have found different themes to be salient in one or both cultures. There is no definitive set. At the same

time, wholly deductive approaches to coding risk reducing rich narrative to simplistic feature counts that, reporting on a single unified set of features, miss the larger themes that can emerge within each unique data set or comparison (for a discussion, see Braun & Clarke, 2006, 2022). These themes are a product of the specific context of interpretation, which includes the interpreters and their individual and cultural backgrounds. Some of the authors are data collectors from the same ethnic group as the participants. We nonetheless acknowledge that many on the authorship team are from the same educated western cultural background that pervades contemporary psychology. Although this perspective does not invalidate the meanings reported and discussed in this article, it has certainly played a role in their construction. We look forward to future research that builds on these findings to present descriptions of meaning-making from a plurality of viewpoints (for a discussion, see Adams et al., 2015; H. C. Barrett, 2022; Harrison, 2011; Medin et al., 2017).

Implications for the field

Our observations stemming from work with Hadza participants do not fit with the folk understandings that have supported traditional theorizing on emotion. This suggests that contemporary psychology's assumptions about how events are made meaningful as emotion may not always be valid. These assumptions impact the way emotion is studied. Most theories of emotion—and, indeed, most psychological theory in general—are written from a cultural perspective that is western and educated (Lillard, 1998; see also Arnett, 2009; Henrich et al., 2010; Trouillot, 2002). This cultural perspective stresses autonomy and values analytical thinking (Markus & Kitayama, 1991; Nisbett et al., 2001). Accordingly, it makes sense to treat instances of emotion as mental experiences that occur within individuals and can be analyzed in a decontextualized manner. Yet this approach misses aspects of emotion that add richness and nuance in all cultural contexts and appear to be primary for some. It is less able to account for folk understandings of emotion that focus on external features, such as the physical and social context of an event. These world-focused experiences are not well represented in emotion research (Lambie & Marcel, 2002) but may be a dominant form of meaning-making for the Hadza and other cultures. Theoretical frameworks that understand emotion as a situated and relational process (e.g., L. F. Barrett, 2017b; Barsalou, 2016; Clark et al., 2001; Gendron & Barrett, 2018; Mesquita, 2003; Parkinson et al., 2005; Ruba & Pollak, 2020) can provide a path forward to a broader, more culturally inclusive, understanding of emotion.

The methods used to study emotion are likewise intertwined with the conclusions that can be drawn. Approaches that use structured response formats, such as multiple-choice or rated questions, constrain the amount of variation that can be observed in meaning-making. These methods may be useful in the context of justification, when testing specific hypotheses, but are limiting in the context of discovery. Here, qualitative methods, such as narrative analysis, can provide a valuable set of tools for exploring how people understand emotion (e.g., Doucerain et al., 2016; Kleres, 2011; Romano, 2014). This part of the research process—the "thick" or "deep" description of the phenomenon of interest (Beatty, 2019; Geertz, 1973)—is often taken up by disciplines such as anthropology (Goldrick, 2022). Psychology is missing this descriptive base. However, a focus on personal narratives or event descriptions is also not a panacea; it cannot fully allay concerns with research's removal of events from their individual and collective timelines or with the insertion of researchers' own perspectives into data collection and interpretation (Beatty, 2010). Equally, narrative construction of events may involve additional detail and structure, or even causal attributions, that do not reveal how the emotion unfolded at the time (Nisbett & Wilson, 1977). Multiple types of data, at multiple levels of analysis and from multiple disciplinary perspectives, are necessary for understanding how emotion is embedded and enacted within both personal and broader sociocultural contexts.

The descriptive base that psychology must build will also need to include data from diverse cultural samples (e.g., H. C. Barrett, 2022; Medin et al., 2017; Rad et al., 2018). In the present article, we have illustrated differences in meaning-making through a targeted counterpoint between Hadza and North Carolina participants. Our central point is that emotion research has been too ethnocentric for too long. Rather than the notion that the Hadza represent an understudied population that can provide all the answers, our observations suggest that this unique cultural context can give new life to timeworn points about the importance of diversity in psychological science. Equally, our illustrations were not intended as statements of what Hadza and U.S. cultures are or are not, as one study cannot articulate this, but rather to show how observations are inherently contextualized by the methods that were used to gather them. Folk understandings of emotion are differently revealed by open-ended response formats and qualitative analysis. We have further situated our findings with reference to a western, educated understanding of emotion and to prior literature that supports key differences between European and European Americans and multiple cultural samples. This approach has unintentionally reified a "west versus rest" dichotomy that

reduces detail and variety in non-western cultural practices to a generic "other" (Hermans & Kempen, 1998). As stated in the introduction, our intention is not that the cultural west should be the default point of comparison. Instead, we wanted to emphasize how this cultural perspective continues to be challenged by the data. Our use of a U.S. cultural sample is intended as a critique of the folk understandings that are used to scaffold the science of emotion. Future work must go beyond dichotomies (H. C. Barrett, 2020, 2022; Ghai, 2021; Vignoles et al., 2016) to produce a body of descriptions, comparisons, and conclusions that is multifaceted and robust.

This effort is especially critical because folk understandings of emotion have real-world consequences for health and well-being. Expectations regarding the impact of emotions on behavior influence the actual impact of emotions on behavior (Tamir & Bigman, 2017). When emotions are believed to represent one's sense of self, as is the case in the United States and much of the cultural west, emotional expression is the norm (Matsumoto et al., 2008). In these contexts, emotional suppression and other forms of expressive management lead people to feel inauthentic and socially distant (e.g., John & Gross, 2004) as well as ineffective and emotionally exhausted (e.g., Allen et al., 2014). However, the impact of suppressing versus expressing emotions varies across cultures (for a review, see Ford & Mauss, 2015). When it is believed that talking and thinking about feelings is unnecessary or even harmful (e.g., Thai Buddhist communities; Cassaniti, 2015), emotional suppression and detachment are associated with outcomes that are less costly (e.g., Butler et al., 2007) or even salutary (e.g., Mauss & Butler, 2010). Similarly, in cultural contexts that understand emotions as internal mental states (e.g., the United States), feelings are the best predictor of physical health, whereas behaviors or activities are the best predictor in cultural contexts that understand emotions as situated action (e.g., Japan; Clobert et al., 2020; see also Miyamoto et al., 2013; Park et al., 2020). Contemporary psychotherapeutic practices are also undergirded by the eurocentric assumptions of a dichotomy between mind and body (Leavitt, 1996) and that the ability (or inability) to articulate subjective feelings indexes both pathology (i.e., alexithymia; Sifneos, 1972) and personhood (Kirmayer, 2007). These understandings are not present in cultures such as China, where integrative, experiential approaches to healing are more common and successful (Zhang, 2014, 2018, 2021).

Conclusion

Qualitative approaches to the study of emotion are often excluded from psychologists' methodological toolkit because they do not lead easily to statistical inference. The observations we have shared about Hadza event descriptions cannot directly be used for hypothesis testing. Yet "the fact that something is not provable does not mean that it is not demonstrable" (Tannen, 1984, p. 37); differences in meaning-making between Hadza and North Carolina participants are apparent, even if they cannot be readily quantified. Closed-form data, gathered using structured response formats, are necessary for building the types of models common to contemporary psychology. But without a solid descriptive foundation, these models may be houses of cards. In the present article, we have used our observations from Hadza interviews to show that there are multiple forms of meaning-making across cultural boundaries. These observations come at a critical moment for the Hadza community, who are currently undergoing economic, social, political, and ecological shifts that may be impacting their daily lived experiences (Gibbons, 2018; Pollom et al., 2020). They also come at a critical moment for the science of emotion (Dukes et al., 2021), providing evidence of the limitations inherent in conventional assumptions about the nature of experience and, we hope, additional impetus for the expansion of psychological theory and practice.

Appendix

Method

Participants.

Hadza interviews. Participants were 94 adults (50 women, 44 men; ages 18–79) from the Hadza hunter-gatherers who live in the Great Rift Valley of northern central Tanzania. Participants were recruited from the area surrounding two camps southeast of Lake Eyasi. Data collection was approved by the Northeastern University Institutional Review Board (No. 13-03-16) as well as the Tanzanian Commission for Science and Technology (COSTECH). Participants provided oral consent in Swahili, their second language and the national language of Tanzania, before the interview and were compensated for participation using COSTECH's guidelines (e.g., clothing, cookware, beads). All interviews were conducted in November 2016.

Although participants provided informed consent in Swahili, they were interviewed in their first language, Hadzane, by fluent Hadzane speakers. To characterize the sample in terms of exposure to other cultures and ways of being, we also asked participants about their schooling and travel habits. Thirty-six individuals had attended local primary school for between 2 and 7 years, with four of those individuals also attending the

regional secondary school for between 2 and 4 years. Most of the individuals we interviewed reported that they traveled only to other Hadza camps, except when visits to regional towns and small cities were necessary for supplies and medical care. Twenty-six individuals reported having been to Arusha, the largest city in the region. Only two of those individuals reported venturing further afield to Dar es Salaam or parts of Kenya. It should be noted, however, that we did not ask how often participants interacted with visitors in camp. High rates of tourism and research with the Hadza community at this time (Gibbons, 2018) make it likely that the individuals we interviewed had contact with noncommunity members without venturing further afield.

North Carolina interviews. Participants were 41 adults (21 women, 20 men; ages 18–70) from North Carolina, recruited from the student body of Wake Forest University (n = 21) and the surrounding community (n = 20). All students and eight community members had completed secondary school (i.e., high school) and at least 1 year of college or university education; the remaining community members (n = 12) had completed at least 1 year of secondary school. Interviews were conducted in English: All participants were native speakers of English and reported growing up in the United States; interviewers were students who grew up in the United States and were also native speakers of English. Data collection was approved by the Wake Forest University Institutional Review Board (No. 99-0048). Participants provided written consent before the interview and were received $15 in remuneration. Interviews were conducted in 1999 to 2000.

Procedure.

Hadza interviews. Participants were interviewed individually by a collaborative team of interviewers: one of two English interviewers (authors K. Hoemann and M. Gendron) and one of two Hadzane interviewers (authors S. M. Mangola and E. S. Endeko). Both Hadzane interviewers identify as members of the Hadza ethnic group. S. M. Mangola and E. S. Endeko are experienced field researchers and speak Hadzane, Swahili, and English. The English interviewer asked questions, which the Hadzane interviewer then translated and adjusted as necessary. Instructions were back-translated for the first few interviews to ensure that they were comprehensive and reliably delivered. Participants responded in Hadzane, and these responses were translated back into English and included in field notes. Interviews were both audio- and video-recorded.

During the interview, we first asked each participant to describe a recent event that made them feel either pleasant or unpleasant, with event valence counterbalanced within gender. If participants had difficulty identifying such an event, we prompted them to describe a recent time when something desirable or undesirable had happened. We then asked participants to elaborate on their description through a series of semistructured questions. These questions focused on a set of features commonly cited in descriptions of experiences of emotion: namely, the setting, physical sensations, feelings, cognitions, desires, actions, expressive behaviors, causes, consequences, and social norms associated with the event (e.g., Ekman, 1999; Scherer, 1984; Shweder, 2004; Smith & Lazarus, 1993). For example, to probe participants for more details about the event setting, we asked where they were and who they were with at the time. To probe for more details about participants' subjective experience and mental processes, we asked what they had been thinking and feeling. As part of the probe for details about physical sensations, we also showed participants a drawn outline of a body and asked them to point to the location of any sensations. At the end of the interview, we asked participants whether they could describe another event when they had felt better or worse than in the event they had just described. An example interview scheme is provided in Table S3 in the Supplemental Material available online.

North Carolina interviews. Participants were interviewed individually by one of two trained research assistants. The interviews were conducted in English and were audio-recorded. The interviewers began by asking participants to describe themselves: where they were from, their family and work life, etc. Each participant was then asked to describe three events: one in which they had felt valued or important, one in which they had felt offended or not taken seriously, and one in which they had felt small or humiliated. Events were always prompted in the same order. For the second event ("offended or not taken seriously"), half of the participants were prompted for situations involving intimate others (e.g., family members, partners, close friends), and half of the participants were prompted for situations involving nonintimate others (e.g., coworkers, classmates, neighbors). After participants described each event, the interviewer asked them a series of semistructured questions designed to elicit additional details of the event and its impact on the participant's feelings and relationships. For example, participants were asked about why they felt the way they did, how this feeling compared in intensity with other similar events, and whether they had an urge to do anything in response. They were also asked whether the event had affected their self-esteem or how they were viewed and treated

by others. An example interview scheme is provided in Table S4 in the Supplemental Material.

Data preparation.

Hadza interviews. The interviews were transcribed in English the same day they were conducted. To ensure reliability, the Hadzane interviewer who was not involved with the initial interview performed the transcription, with the English interviewer present for clarification and to update any field notes accordingly. Interviews were transcribed for content only, including initial event descriptions as well as interviewer probes and responses to them; time stamps, pauses, et cetera were not included. Transcripts were edited to ensure clarity of interpretation while preserving the character of the original translation. Because participants were not instructed to withhold identifying information such as names, dates, and locations, transcripts could not be fully anonymized.

Interviews from 12 participants were excluded from thematic coding because they provided too little narrative content, for a final total of 82 transcribed interviews. Video recordings and responses to the body-localization task (when participants were asked to describe physical sensations associated with an event) are not analyzed in the present article.

North Carolina interviews. Interviews were transcribed by the interviewers, helped by two paid research assistants, for content only (e.g., time stamps and pauses were not included) and without anonymization. No interviews were excluded from analysis; however, several participants were not able to provide a response to one or more events. Four participants could not think of a time when they had felt small or humiliated (the third event), one participant could not think of a time when they had felt offended or not taken seriously (the second event), and one participant did not respond to either of these events.

Thematic coding.

We coded the Hadza interviews following an interview review process like that described by Braun and Clarke (2006). The first author (K. Hoemann) and the sixth author (È. Dussault) independently reviewed all transcripts and manually noted the themes that emerged. These themes were documented without regard to the event valence. Through a series of discussions, themes were differentiated, merged, or discarded. The final set of themes was used to select a set of representative interviews for illustration. These interviews and their annotated themes were shared with all remaining authors, who provided additional refinements.

We followed a similar, parallel process with the North Carolina interviews, which were coded by the first author (K. Hoemann) in consultation with the final author (B. Mesquita). As before, themes were documented without regard to within-participant (situation) or between-participant (intimacy) differences in interview content. We also disregarded content in the North Carolina interviews that was related to events' longer-term effects on participants' self-esteem and relationships with others, as there was no parallel content in the Hadza interviews.

Transparency

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Author Contributions

K. Hoemann, M. Gendron, S. M. Mangola, and E. S. Endeko conducted the Hadza interviews analyzed in this article. K. Hoemann, È. Dussault, and B. Mesquita analyzed the transcripts. K. Hoemann drafted the article. All authors provided revisions and approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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participant privacy, we have not made the interview transcripts analyzed in the present work publicly available.

Supplemental Material

Additional supporting information can be found at http://journals.sagepub.com/doi/suppl/10.1177/17456916231178555

Notes

1. The idea that humans are natural storytellers has been challenged. According to Desjarlais (1997), the use of narrative to study meaning-making relies on the assumption that people inherently experience events as cohering through time—when actually this way of being in the world is predicated on an understanding of the self as continuous and integrated. We consider the implications of our approach and findings, including the intersection with cultural models of the self, in our discussion. For further reading, see Beatty (2010, 2013, 2019).
2. In later cross-cultural work between the United States and Uganda, Davitz returned to collecting (written) emotion narratives (Davitz, 1969, Ch. 7).
3. Since seminal ethnographies on emotion were published (e.g., Abu-Lughod, 1986; Briggs, 1970; Rosaldo, 1980), work in anthropology has largely transitioned to studying neighboring concepts such as subjectivity, embodiment, and affect (for a discussion, see Beatty, 2013, 2019).
4. Wallbott and Scherer (1988) justify the use of student samples based on the observation that "the task of remembering and describing emotional situations in some detail calls for a rather high degree of introspective ability and articulateness" (p. 39) and for comparability with prior research.
5. The prompted responses in the interviews—unlike the initial, open descriptions of events—do not clearly fit with traditional notions of narrative structure (e.g.,. Labov, 1972). However, neither is this content a collection of disconnected statements; it serves as discourse around the initial description, providing additional insight into folk understandings (Narrative). From this perspective, the interviews resemble modes of conversational storytelling that can be seen as narrative-in-interaction (for a discussion, see Bamberg & Georgakopoulou, 2008).
6. A distinction between action identification and mental state inference is likely an overly simplistic way of interpreting cultural differences in how people explain others' behavior (Gendron et al., 2018). Multiple frameworks have been proposed, focusing on the role of factors such as intentionality (Duranti, 2015), dispositional versus situational explanations (e.g., Markus & Kitayama, 1991), and explicit versus implicit forms of mental state inference (e.g., Robbins & Rumsey, 2008). It is also possible for both action identification and mental state inference to be useful forms of meaning-making, consistent with arguments that mental state inference is learned and deployed on the basis of its utility in a given cultural context (e.g., Heyes & Frith, 2014; McNamara et al., 2019; Potter, 1988).
7. Kleinman (1980) also noted that a preference for somatic descriptions or understandings of experience ("somatization") in China may have been due to fears about focusing on feelings during the Cultural Revolution era.
8. Lutz (1988), for example, asked Ifaluk informants to explain the concept of their word *song* ("justified anger") and used the schematic, scenario-based responses ("when someone has done *X* to you") to support the inference that Ifaluk emotions lack a focus on subjective feeling. It is possible that this method of elicitation accounts, in part or in whole, for the character of response—participants were describing the reference (i.e., constituent instances) rather than the sense (i.e., subjective experience) of the events covered by each emotion term (for a discussion, see Beatty, 2010, 2013, 2019).

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