Neglected Emotions: An Introduction

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Abstract Given the importance of emotions in our everyday lives, it is no surprise that in recent decades the study of emotions has received tremendous attention by a number of different disciplines. Yet despite the many and great advantages that have been made in understanding the nature of emotions, there still remains a class of emotional states that are understudied and that demand further elucidation. All contributions to the special issue consider either emotions or aspects of emotions that deserve the label 'neglected.' In doing so, they break new theoretical ground and further our understanding of the nature of the emotions that they consider. The aim of the present paper is to introduce the special issue on neglected emotions by articulating the different ways in which emotions can be said to be neglected.

1.Introduction

For most of us, emotions permeate our waking life—not just by coloring it with this or that affective shade, but by profoundly shaping it. The presence of emotions is what commits us to the various projects that we choose to make our own and what defines our dealings with the world, others, and ourselves. Emotions can influence cognition, memory, decision making, and perception (e.g., Bradley et al. 1995; Forgas 1995; Niedenthal & Kitayama 1994; Phelps & Anderson 1997; Schwarz & Clore 1996; Zadra & Clore 2011). They prepare us for what is to come and connect us to what has passed. And they motivate us to do many of the things that we do—the good, the bad, the extraordinary, the mundane (Cacioppo & Gardner 1999; Frijda 1986).

Emotions do all of these things in part because of their near ubiquitous presence in our lives. If emotions were but a rare occurrence, then their function and significance would be limited to those extraordinary instances during which we would experience an emotional state. But emotions are not rare. Although estimates vary, research utilizing experience sampling methods has shown that most people experience emotions most of the time. A diary study involving 96 families and more than 15,000 single reports conducted by Perrez and colleagues (1998) found that 90 percent of the parents and 97 percent of the adolescents reported at least one emotion per day (reported in Wilhelm et al. 2004). The same researchers also found that an average adult person experiences an emotion at least three or four times a day, and some might even experience an emotion in almost every situation (Wilhelm et al. 2004). In a different set of studies during which physiological activity of participants was continuously monitored, Myrtek and colleagues (Myrtek et al. 2001; Myrtek 2004) reported that women felt an emotion approximately 40 percent of the time (about 20 per day) and men approximately 30 percent of the time (about 15 times per day) (reported in Wilhelm et al. 2004). An even higher estimate of the frequency of emotional experiences is reported by Trampe, Quoidbach, & Taquet (2015). Trampe and colleagues designed a free smartphone application that allowed them to measure various aspects of the users' psychological experiences using short questionnaires that were presented to users at random times throughout the day. One of these was an emotion questionnaire that asked users to indicate whether they were currently experiencing either any of the eighteen emotions that were listed on the questionnaire, or no emotion at all. For their study, Trampe and colleagues collected more than 65,000 emotion reports from

over 11,000 participants. They found that participants reported experiencing one or several emotions 90% of the time.

But it is not just the frequency of emotions that is of importance. What also matters is the variety of emotions that we can experience and are in a position to notice and differentiate (Lindquist & Barrett 2088). For if emotions were not many—if they were limited in number of distinct kinds—then their effects would be circumscribed and predictable, incapable of addressing the demands of a dynamic and changing world. The same research that shows the frequency of emotional experiences also supports their variety. From the eighteen emotions that were included in Trampe et al. (2015)'s questionnaire, only contempt was rarely experienced (it was experience 1% of the time).

The variety and richness of our emotional experiences is also supported by investigations of mixed emotions. Mixed emotions are the simultaneous (or near simultaneous) co-occurrence of brief positive and negative affective states (Larsen et al. 2017). Results from both experience sampling and laboratory studies demonstrate that individuals experience mixed emotions. Typically, mixed emotions arise when one is presented with a complex event that can be appraised as having both pleasant and unpleasant components, such as guilty pleasures (Hofmann, Kotabe, & Luhmann 2013; Ramanathan & Williams, 2007; Li 2015), or when one undergoes ambiguous experiences, such as schadenfreude or benign envy (Lin & Utz, 2015; Combs et al. 2009). Sometimes, however, even the status quo can elicit mixed feelings (Norris & Larsen 2019). For instance, when our situation could have turned out to be either worse or better, the status

quo can be experienced as bittersweet: we are both dissatisfied that things didn't turn out to be better and relieved that they didn't get worse.

We don't just experience emotions often; we also experience them in numbers and in variety—mixed or pure. The realization that our emotional lives are rich may not be surprising to us, the subjects of our emotions. Nonetheless, it is a call to better understand such richness. Indeed, in order to make progress into the investigation of the nature of emotions, our theoretical study of emotions ought to be capable of capturing their real-life complexity. We need enough distinctions and categories so that our accounts are fine-grained enough to capture our experiences, and we need to study as many emotions as we can. Despite great progress in the study of emotions, some emotions remain understudied and neglected. In what follows, I ask and answer the question: 'What are neglected emotions?' An understanding of how neglect applies to emotion research is necessary in order for progress to be made in better articulating aspects of our emotional lives that have gone unnoticed and that demand further elucidation.

2. Varieties of Neglect

What are neglected emotions? It is unnecessarily complex and, at least for present purposes, counterproductive to read this question as a question of ontology. By asking, 'What are neglected emotions?', we are not asking for a definition of emotions, nor about how emotions are distinguished from other emotional phenomena (e.g., affective reactions, moods, affective dispositions), nor even about whether the category of emotions is a

natural one or not. What is being asked is simply this: out of all the things called 'emotions' which ones are neglected?

The simplicity of the question might lead one to think that it must admit of a simple answer. But it doesn't. For one, there is the worry—misplaced, but worry nonetheless—that the manner in which the issue has been formulated is inadequate. Some emotions, one might protest, are so neglected that they haven't even been identified *as* emotions. To be on a list of emotions, the protest continues, is already not to be neglected. So, to ask, 'Which of our emotions are neglected?', is to miss the really neglected ones.

Such a worry, I already opined, is misplaced. To neglect an emotion does not mean to be oblivious to it. Correlatively, the topic of neglected emotions isn't the topic of what are the *missed* emotions—that is, those emotional states that both commonsense and conceptual or empirical theories have missed or passed over. No. The question is asking something else. Neglected emotions are emotions with which we are familiar, but which we have nonetheless failed to analyze, study, or theorize adequately.

To get closer to an answer to the question, we need a criterion of neglect. But there isn't only one. This is the reason why I claimed that the question of neglected emotions doesn't admit of a straightforward answer. Indeed, if 'being neglected' is said in many ways, then neglect would likewise be performed in many ways. And there are different ways in which one could describe the category of neglected emotions. Consider the following:

NE1 Neglected emotions are ones that are neglected *relative* to other emotions; these aren't necessarily the discarded or ignored emotions but the understudied emotions comparative to other emotions that are well studied and understood.

As a way of characterizing neglected emotions, NE1 won't do. And that is not because it doesn't already come with a criterion of comparative neglect. We could always make one up. The real issue with NE1 is that it's not interesting enough. NE1 offers a merely descriptive characterization of neglected emotions. Neglected emotions are just the emotions that happen, for whatever reason, significant or not, to be understudied. But in asking, 'What are the neglected emotions?', we are presumably asking for something more than just the names of these emotions; we are also inquiring into the nature of this neglect. We would like to know why they are neglected.

A different characterization is thus needed. So consider:

NE2 Neglected emotions are emotions that are understudied relative to the frequency by which we experience them.

NE2 is an improvement over NE1. Not only does it allow us to list the neglected emotions, but also, and unlike NE1, it provides a reason as to why some emotions are neglected while others are not. To employ NE2, we would need to be in possession of two items: a measure

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Step one: thoroughly search our databases for publications that deal with emotion types and create distinct categories, one for each emotion type considered in the literature. Step two: group the publications into their respective emotion-type categories (publications that deal with more than one emotion type, they can be placed in more than one categories). Step three: count how many articles address each emotion type. Step four: calculate the average number of publications per category and determine the standard deviation of the population (or some sort of measure of deviation from the average number of publications per category). Step five: determine the neglected emotions by setting a criterion of neglect using the calculated average and standard deviation. Suppose that our search yielded the following results: 100 publications focus on fear, 200 on anger, 50 on disgust, and 20 on sadness. We can then calculate the mean and standard deviation of our population. And we could arbitrarily set a criterion of neglect in the following way: if the number of publications concerned with an emotion type falls below one standard deviation from the mean, then that emotion type is neglected. Using this criterion, sadness would qualify as neglected.

of the average frequency of each emotion type in our lives and a measure of how studied each emotion type is. With those two measures in hand, we could examine whether there are any frequently occurring emotions which, however, are not well studied. What are the frequently occurring emotions? What does it mean for them to be well studied? To offer answers to these questions, we would need to assert a criterion value above which it would make an emotion frequently experienced and a criterion value below which it would make it understudied. The details need not concern us here and there doesn't seem to be a non-arbitrary way of answering those questions. But the arbitrariness involved in the act of setting these criteria isn't a problem and shouldn't perturb us. NE2 does its job. It offers a way forward.²

NE2 understands neglect in terms of frequency. Neglected emotions are ones that are frequently occurring (according to some criterion) and which are at the same time understudied (according to some other criterion). There are, however, alternative ways of expressing neglect. Consider NE3.

NE3 A neglected emotion is an emotion that is understudied relative to its significance.

NE3 could reduce to NE2, if 'significance' just means frequency, but it doesn't have to. In fact, it is possible that NE2 and NE3 might pull us in opposite directions. A frequently experienced emotion could be relatively unimportant. On the contrary, a rarely

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From the study by Trampe et al. (2015), fear was found to be experienced relatively infrequently (5% of the time) whereas amusement was experienced more frequently (16% of the time). A PsycINFO search for publications with "fear" in the title reveals 15,490 results, whereas "amusement" only yields 79 (October 2, 2019). Such results suggest that amusement is neglected relative to the frequency by which we experience it.

experienced emotion could have profound effects and thus be significant. Existential angst or religious awe are just two examples of infrequent but potentially potent emotions.

NE3 leads to theoretically productive questions. If we were to espouse NE3, we would need to articulate the operative notion of significance. But just like 'neglect', 'significance' is also said in many ways. Thus, a proliferation of answers to our initial question seems unavoidable. One possibility is to follow Trampe et al. (2015) and to articulate significance in terms of the role that emotions play within the emotional network. For Trampe and colleagues the emotional network consisted of the 18 emotions that were part of their questionnaire. The role of each emotion was determined by representing it as a node and the network as a weighted undirected graph connecting each emotion on the basis of the correlation coefficient between any two emotions. Utilizing this representation of the emotional network, the researchers delineated three categories of emotions: 'connector emotions,' 'provincial emotions,' and 'distal emotions.' Connector emotions are those that are strongly connected to many other emotions—both of the same and opposite valence. Joy, for example, was found to co-occur with the positive emotions of satisfaction, pride, hope, gratitude, and amusement but also to inhibit the co-occurrence of negative emotions such as sadness, disgust, anger, and anxiety. In addition to joy, satisfaction, amusement, sadness, disgust, and anger were also categorized as connector emotions. Provincial emotions are emotions that tend to co-occur with emotions of the same valence but do not inhibit emotions of opposite valence. The positive emotions of love and pride and the negative emotions of fear and guilt were found to be provincial emotions. Distal emotions are ones that rarely co-occur or inhibit other emotions.

Contempt and embarrassment were shown by Trampe et al.'s analysis to be isolated from other emotions. Using centrality as a way of understanding significance, distal emotions would be the least significant emotions. Furthermore, the researchers also found that centrality and frequency were not strongly related, indicating the independence of this criterion of significance to one utilizing frequency. Neglected emotions then would be, primarily, those connector emotions that are understudied.

Whether centrality in a network of emotions is *the* criterion of significance is not an issue that we ought to resolve. It is certainly *a* criterion of significance and that is enough. Centrality is a measure of the role that emotions play within our emotional economy and because of that, it is an important tool in trying to determine the effects of emotions on one's well-being. If there are positive emotions which are effective inhibitors of a large number of negative emotions, then positive psychology and philosophical investigations on emotional well-being ought to take those emotions seriously and find ways to cultivate their more frequent experience.

Neglect, however, need not just apply to emotions as *types*. It could also be applied to specific aspects or characteristics of emotions. That is, for any given emotion type, we might ask whether some aspect (or characteristic) of that emotion type has been neglected. As such, another candidate for a characterization of neglected emotions suggests itself:

NE4: A neglected emotion could be neglected not in the sense that the emotion as such has failed to grab the attention of researchers but because some aspect of it has been understudied.

'Aspect' may mean different things. Here, I limit my attention to just three different explications of this term. First, in the literature, and specifically in the *empirical* literature of emotions, emotions are commonly treated as multidimensional constructs. That is, emotions can be analyzed in terms of the components that characterize them or even compose them (Scherer 1984)³. So, talk of an aspect of an emotion might be talk of a specific component of an emotion. And a neglected aspect might just simply be a component of an emotion that hasn't been properly or sufficiently studied.

Second, talk of an aspect of an emotion might refer to the role (or part of the role) that the emotion plays in a specific context. The outcomes (correlates, effects, and concomitants) of an emotion might be well studied in one context, even though they might be understudied in another (e.g., in an academic, occupational, or creative context).

Relatedly, the moral, religious, or aesthetic dimensions of some emotions might have gone unnoticed, even if the emotions themselves have been the subject of much study. To give just one example, the relationship between frustration and aggression has been explored in detail—both in humans and in animals (Amsel 1992, Berkowitz 1978; Dollard et al. 1939). Yet the role of frustration in our moral lives and in the context of aesthetic appreciation and creativity remains largely underexplored.

Third, talk of an aspect of an emotion might simply mean whether the emotion is conceptualized as a transient affective state or as a personality trait, i.e., a long-lasting

What are the different components that characterize (even compose) emotions? Emotions are thought to have the following components: (1) an affective or phenomenological component that amounts to the subjective experience of having the emotion; (2) a physiological component that includes both neurological and somatic correlates of the emotion; (3) a volitional/behavioral component that is comprised of the desires and action-tendencies associated with the presence of the emotion; (4) a cognitive component that is the set of the effects of the emotion on perceptual and cognitive processes (and also the effects of those processes on the emotion); and (5) an expressive component that includes all facial, bodily, and vocal expressions associated with the emotion.

disposition. The distinction is basic but important: (i) the nature of an emotion might look very different depending on whether it is understood as an affective state or as a personality trait; and (ii) there's no guarantee that interest in the study of an emotion as a personality trait would give rise to interest in the study of the same emotion as a transient state, and vice versa.

Lastly, and to complicate matters further, neglect could involve both an institutional (or disciplinary) and a temporal dimension. On the one hand, the emotions that garner the attention of one discipline may not be the emotions that are deemed worthy of study by another discipline—there are often sociological reasons that may affect different research programs such as, funding opportunities, and technological, medical, or pharmaceutical advances. Consequently, what is neglected in one discipline need not be neglected in another. On the other hand, different time periods (years, decades, centuries) may place different emphasis on which emotions are worthy of examination or study—there are, after all, fads and trends. It may even be the case that some emotions are thought to describe or capture the current Weltanschauung better than others. As such, these emotions, because of their role in our Weltanschauung, might gain significance and their status as neglected could change.

In sum, different emotion types can be neglected for different reasons and in different ways—one type according to NE2, another type according to NE3, and so on. But even when we hold fixed the emotion type, we may still discern ways in which that emotion can be said to be both neglected and not neglected at the same time. Neglect is not simple but complex.

3. The Case of Boredom

Examples help. Before concluding the analysis of neglect, it would be helpful to apply it to a specific emotion. So, consider boredom. Is boredom one of the neglected emotions?

Many have certainly thought so and in *Conquest of Happiness*, Bertrand Russell gives voice to one of the most famous expressions of this assessment. He writes:

Boredom as a factor of human behavior has received, in my opinion, far less attention than it deserves. It has been, I believe, one of the great motive powers throughout the historical epoch, and is so at the present day more than ever. (2013 [1930], 57)

Russell's operative notion of neglect is NE3, but not NE3 alone. It is on the basis of NE3 that Russell deems boredom to be neglected: despite its great and lasting significance (which Russell attributes to its motivating power), boredom remains understudied. But Russell's statement lends itself to an additional (not opposing) characterization of boredom's neglect. For if Russell is correct to hold that boredom is particularly important for his 'present day,' then the need for understanding boredom becomes all the more pressing. Failure to meet such a demand could render boredom neglected: not because boredom is ignored or forgotten, but because it is not studied enough given the heightened significance that it carries for the 'present day.'

Russell's contention regarding the status of boredom research is neither idiosyncratic to Russell nor specific to the time of his writing (i.e., the 1930s). Since

Russell, many authors have discerned both a lack in our understanding of boredom and called for further study of boredom. Even 82 years after Russell's assessment, one still encounters the view that boredom is an understudied affective phenomenon. In one of the most influential attentional characterizations of boredom, Eastwood and colleagues contend that 'the scientific study of boredom remains a relatively obscure niche and boredom itself is still poorly understood' (2012, 483).

Pronouncements of neglect ought to be taken, however, with caution because neglect within one domain (or discipline) does not entail neglect more broadly (see Ros Velasco 2017). In fact, religion, philosophy, and literature have been preoccupied, since their inception, it seems, with the topic of boredom. Traces of what we now call 'boredom' can be found in ancient Greek and Roman thought (Kuhn 1976; Leslie 2009). Plutarch, Lucretius, Horace, and Seneca give voice to this phenomenon, but the history of boredom, because of boredom's relationship to sloth and idleness, can be traced even further back in time and outside of Western civilization (Raposa 1999; Toohey 1988). With the rise of Christianity, boredom was transformed into acedia (literally: lack of care) and became a moral subject. The religious discussions of acedia contain the first sustained examination of the nature of boredom, including its effects, antecedents, and its relationship to other emotional and physical states. Focus on boredom ultimately moved away from acedia. The discourse on boredom was concerned with tristesse, secularized melancholy, spleen, mal du siècle, ennui, among others, before eventually giving way to our contemporary boredom (Goodstein 2005). Our intellectual history is replete with attempts to understand and make sense of the phenomenon of boredom-too many to list here. Whoever has claimed that

boredom is an unexplored phenomenon must not have been paying attention.

Even though boredom may not have been neglected at large, it is still the case that it has been neglected in a more restrictive sense. It turns out that within the context of behavioral and brain sciences, boredom has been, up until the recent past, neglected. Thus, Eastwood et al.'s pronouncement of neglect – one which limits neglect to scientific approaches to boredom – is accurate. To be sure, the 20th century contains a number of scientific studies on boredom. All the same, at the time of the Eastwood et al.'s paper, the empirical literature on boredom was small compared to that of other affective phenomena and in a somewhat incipient form.

Even now, boredom is not studied as much as other emotions. Between 2012 – 2018 there have been 285 papers published in behavioral sciences and mental health journals with either 'boredom' in the title or as one of their keywords. Although this number is significantly smaller than the corresponding number of publications for the same time period and search criteria on fear (6,915), anger (2,490), shame (1,678) and anxiety (27,694), it does indicate a clear and growing interest in the topic of boredom. Indeed, it is now a stretch to call boredom 'neglected.' Research on boredom is both active and interdisciplinary. Researchers are exploring the neurological and physiological correlates of boredom and its relationship to physiological arousal; they are articulating boredom's cognitive effects, correlates, and concomitants and specifically, its relationship to attention, to the perception of meaningfulness, and to the perception of the passage of

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The database used for the search was PsycINFO and search was conducted on October 16, 2019. Chin et al. (2017) examined the situational, emotional, and demographic correlates of boredom using experience sampling methods. They collected more than 1 million reports by over 3500 subjects and found that boredom was more frequently reported than anger, even though between 2012 – 2018 anger has received close to ten times more attention in the literature than boredom.

time; they are better understanding the volitional character of boredom; and are investigating and describing the various ways in which boredom can affect our behavior. (For reviews of recent empirical work on boredom, see Elpidorou 2018a, 2018b.) In addition, boredom's role within specific domains, such as the classroom or occupational and organizational settings is being studied, as well as boredom's influence on the lives of clinical populations. Lastly, theoretical models about the character and function of boredom have been advanced and are currently evaluated, and the relationship of boredom to other regulatory and functional processes is discussed and debated (Bench & Lench 2013; Danckert et al. 2018; Elpidorou 2014, 2018b, in-press; Kurzban et al. 2013; Van Tilburg & Igou 2012). Boredom is now better understood both as an affective phenomenon and as an integral part of human existence.

There are at least three advancements that could have played an important role in the growth and success that boredom research is now experiencing. First, there is the development and validation of measures to assess the presence of boredom both as a transitive affective state and as a personality trait. Although a dedicated self-report measure of the personality trait of boredom has been available since mid-80s (Farmer & Sundberg 1986), only recently have researchers began developing psychometrically sound measures of state boredom (e.g., Fahlman et al. 2013; Todman, 2013) and scrutinizing the psychometric properties of existing measures of trait boredom (e.g., Struk et al. 2017). On account of such work, researchers are now in a better position to detect the presence of boredom, to explore the outcomes of boredom, and to articulate limitations with available measures. Second, great progress has been made in exploring the neurophysiological

correlates of boredom (for reviews, see Danckert et al. 2018; Raffaelli, Mills, & Christoff, 2018). Such work allows for a better understanding of the workings and character of boredom; and it is both theoretically and experimentally productive for it generates hypotheses regarding boredom's relationship to attention and mental effort. Third, and perhaps most importantly, there's been an appreciation of the relevance and importance that boredom occupies in our lives. Boredom is no longer considered to be a trivial phenomenon. As a transient psychological/affective state, it is a great motivating force and an important influence on one's life (Elpidorou 2020). As a long-term personality trait, boredom is a serious concern given its relationship to many psychological and physical harms and may constitute even an obstacle to the possibility of living a flourishing life (Elpidorou 2017; Vodanovich & Watt 2015).

Our brief description of the empirical research on boredom elucidates the different ways in which an emotion may or may not be neglected. Importantly, it is also a testament to how quickly intellectual tides can change. Boredom research thus offers optimism to those researchers who work in more 'fringe' areas of human psychology.

4. Conclusion: A Word or Two About the Issue

There is no simple way of understanding the notion of neglected emotions and determining its extension. All the same, all of the contributions published in this issue consider either emotions or aspects of emotions that deserve the label 'neglected.' Regret, grief, spite, being moved, and aesthetic emotions are examined under a new and

productive light. Because of that, the contributions break theoretical ground and advance our understanding of our emotional lives.

I am grateful to all the authors who have submitted their work to be considered for publication in the special issue and for their patience during the review process. I am also indebted to the many reviewers who have graciously reviewed the submissions. Without their generosity, this special issue would not have happened. Until a better system of compensation is put in place by journal publishers, the only payback that I can offer to reviewers is one that comes in the form of words: Thank you. Lastly, I thank the editor-in-chief of *The Monist*, Fraser Macbride, for his support and valuable assistance.

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