# In Awe of God, Nature and Technology: A Lexical Approach to the Differentiation of Emotional Responses

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#### **ABSTRACT**

This article investigates typical usage patterns of the word awe in the English language and how it is related to psychology to depict specific lexical representation of emotions. Contextual analysis of the corpus data revealed inconsistencies in the lexicographic description of awe, regarded by most dictionaries as monosemous. Using linguistic tools of analysis, a functional classification of awe experiences in English-speaking culture was created in the form of a dictionary entry for the word awe. The analysis demonstrates that awe has a threefold sense structure based on two major distinctions: 1) evaluative attitudes of the perceiving self (ambivalent, positive, negative) and 2) vastness of perceived stimulus (transcendental vs mundane). The established collocational patterns suggest that cases exist of purely negative transcendence described by the word awe as it is largely overlooked by modern psychological studies because of prescriptive research designs. Therefore, the descriptive tools of lexical analysis might better be considered for improved differentiation of the emotional states as highlighted in typical collocational patterns of natural language.

Keywords: archetype; awe; corpus analysis; lexicography; transcendental experience

#### INTRODUCTION

In psychology, linguistic methods of analysis in the study of emotions are often discarded on the assumption that "linguistic markers do not necessarily trace out the most important psychological boundaries" (Haidt & Keltner, 2003, p. 303). As a result, psychologists tend to be prescriptive when designing experimental studies and they often begin by prompting participants to think of awe experiences in a particular way (Graziosi & Yaden, 2019). This means that a whole range of emotional states that are typically described by native speakers of English as 'being in awe' are left out of psychological studies simply because they do not necessarily correspond to the scientific understanding of this emotion.

However, such a prescriptive approach in psychology has certain limitations. Being biased in favour of one particular interpretation, researchers might overlook important aspects of emotional experiences as they are classified in specific cultures. Therefore, this paper attempts to adopt a more descriptive approach by using linguistic tools of analysis to examine how *awe* is currently used by native speakers of English in different contexts to distinguish typical patterns of its usage. This will help create a functional classification of awe experiences in modern English culture that will be presented at the end of this article in the form of a dictionary entry for the word *awe*.

### THE PSYCHOLOGY OF AWE

Awe is often regarded as the backbone of religious experience related to human perception of the 'holy' (Otto, 1958). Despite its ancient origins in the human psyche, this 'primordial' emotion (Kearney, 2002, p. 88) has not been adequately studied. The scientific inquiry into the functions and manifestations of *awe* only started at the turn of the twenty-first century with an article published by the American psychologists Haidt and Keltner (2003).

In their foundational study, Haidt and Keltner distinguished two central features (vastness and accommodation) and five peripheral or 'flavouring' features of this emotion (threat, beauty, ability, virtue and supernatural). According to this cognitive prototypical approach, the central features are present in every awe experience, while the peripheral features are variously combined in different situations and play the role of additional "flavours" (2003, p. 305).

"Vastness refers to anything that is experienced as being much larger than the self, or the self's ordinary level of experience or frame of reference" (Haidt & Keltner, 2003, p. 303). Accommodation is understood as "the process of adjusting mental structures that cannot assimilate a new experience" (2003, p. 303). Thus, *awe* is interpreted here as an emotion that arises when contact is made with something that transcends the boundaries of ordinary human understanding (vastness) and requires the readjustment of pre-existing mental schemas and beliefs (accommodation).

As we can see, the basic features, as distinguished by Haidt and Keltner, tell us nothing about the evaluative characteristics of *awe*. Does this transcendental experience of contact with the unknown frighten, inspire, terrify or fascinate the perceiver? The peripheral features listed above imply that threat-based cases of awe-related experiences are "flavoured by feelings of fear" (2003, p. 304). Fear might also be present as a reaction to the supernatural. The remaining features are positive, which hypothetically allows for three different types of evaluative combinatorial patterns: 1) *ambivalent awe*: if an element of threat is combined with another positive appraisal such as beauty, 2) *positive awe*: if the threat is absent, 3) *negative awe*: if the transcendental feeling of going beyond the boundary is exclusively threat-based.

Despite this hypothetical possibility, *awe* is currently being studied in psychology mainly as a positive emotion that contributes to the general wellbeing of the person who experiences it (Joye & Bolderdijk, 2015; Prade & Saroglou, 2016; Tugade et al., 2016). Most psychologists only investigate positive aspects of *awe*, pointing out that it leads to reduced reliance on stereotypes (Yee & Shiota, 2013), favours prosocial behaviour (Piff et al., 2015), and improves life satisfaction (Rudd et al., 2012). Such emphasis on the positive aspects of the transcendental experience produces a rather one-sided picture, blotting out the less desirable effects that the feeling of awe might produce in the human psyche.

Only two studies have been found to have elaborated on the negative aspects of *awe* experiences, stressing the ambivalent nature of this emotion (Gordon et al., 2017; Pearsall, 2007). Both studies distinguish between two variants of *awe* but on a slightly different basis. Pearsall characterises *awe* as:

...an overwhelming and bewildering sense of connection with a startling universe that is usually far beyond the narrow band of our consciousness... is made even more intense and bothering because it comes with the frightening, increased awareness of how small and powerless we are and how briefly we live. (2007, p. 9)

This 'true awe', or 'the awe of understanding', is opposed to what he calls 'the ignorant awe', which is a simple state of fascination that leaves one within the confirmed frame of reference (2007, p. xviii).

Gordon et al. (2017, p. 317) also focus on certain negative aspects of *awe*, suggesting that we should distinguish between "awe characterised by perceptions of threat versus more positively valenced awe." The authors found important differences in physiological reactions when these states were induced (heart rate and respiration rate), which allowed them to conclude that threat-based and positive *awe* are two distinct variants of the same emotion, with "threat-based *awe* manifesting little benefit for overall wellbeing" (2017, p. 326).

As we can see, psychologists tend to focus on positive aspects of awe-related experiences. The negative impact of *awe* on the human psyche is rarely discussed in psychological studies, and the possibility of experiencing *awe* as a purely negative emotion is

not considered in psychology at all. At the same time, several studies distinguish between two different variants of awe.

#### AWE IN LEXICOGRAPHY

- 1. A feeling of great respect and admiration, often combined with fear (McMillan Online Dictionary)
- 2. Awe is the feeling of respect and amazement that you have when you are faced with something wonderful and often rather frightening (COBUILD Advanced English Dictionary)
- 3. A feeling of reverential respect mixed with fear or wonder (Lexico)
- 4. A feeling of great respect, sometimes mixed with fear or surprise (Cambridge Online Dictionary)
- 5. A feeling of great respect and liking for someone or something (Longman Online Dictionary)
- 6. 1: an emotion variously combining dread, veneration and wonder that is inspired by authority or by the sacred or sublime
  - 2 (archaic):
  - a: DREAD, TERROR
  - b: the power to inspire dread (Merriam-Webster Online Dictionary)

These definitions of *awe* as a noun were taken from leading online contemporary English dictionaries. Despite the emotional complexity associated with *awe* as a term in psychology, the word itself is treated by most of the dictionaries as monosemous (1)–(5), the only exception being the Merriam-Webster dictionary, which provides two senses for the word and labels the second one 'archaic'.

The definitions of the main sense of the word, which is the only one for most dictionaries, fall into two categories:

- A. (1)–(4) and (6) treat the word *awe* as denoting a complex *ambivalent* emotion combining three major elements *respect* (admiration (1), veneration (6)); *surprise* (amazement (2), wonder (3), (6)); *fear* (frightening (2), dread (6));
- B. (5) defines awe as a purely *positive* emotion of respect and liking.

There is an interesting discrepancy between the treatment of *awe* in psychology and its lexicographic description. The dictionary entries listed above define *awe* as the combination of respect, surprise and fear, which does not presuppose the idea of transcendence forwarded by psychological studies. Only definition (6) in the Merriam-Webster dictionary hints at the idea of transcendence by indicating that *awe* is the human reaction to the sacred or sublime.

Another important point is that, in lexicography, the negative element of fear and even dread is present in most of the definitions, making them ambivalent rather than positive. The second archaic sense of the word *awe* in the Merriam-Webster dictionary is defined as dread or terror, which is the only instance of *awe* being characterised as a purely negative emotional experience. Therefore, the negative appraisal of threat in the interpretation of *awe* is much more prominent in lexicography than in psychology.

Even the Longman online dictionary, which defines *awe* positively as a combination of respect and liking, uses an example that presupposes the existence of fear: 'Most people stand in *awe* of these agglomerations of power, admit their inability to fight them, and submit' (n.d.). The words 'inability to fight' and 'submit' evoke the idea of fear and hate rather than respect

and liking; the desire to fight a hateful power is inhibited by the fear of its strength and leads to submission.

Such inconsistencies between definitions and examples reveal the inadequate nature of the description of the word's sense structure. Many dictionaries avoid this kind of problem by including probability words, such as 'often' (1 and 2) or 'sometimes' (4) in their definitions. However, this solution does not reveal if there are typical combinations of the mentioned elements in particular types of situations.

The rest of this article attempts to answer this question by looking at how awe is used by modern speakers of English. Psychological findings will be integrated with linguistic methods of analysis to discover how both sciences can contribute to a better understanding of the interaction between their respective objects of study – awe as a word in natural language and awe as a term for emotion in psychology.

#### **METHOD**

This study is based on the ideas forwarded by the linguo-anthropological school, founded by Professor Tolochin (2012, 2014). It supports the currently popular view that the meaning of a word is the function of its context and does not exist in isolation (Harris & Hutton, 2007).

The major distinction of the linguo-anthropological approach is the idea that semantic processes are determined by evaluation. Traditionally, word meaning is represented as a combination of the reference-based literal meaning (denotation) and various emotional and associative elements (connotations) (Chandra, 2017) that play the role of secondary flavours. In contrast, Tolochin et al. (2014) demonstrated that each word has its emotional charge that is inseparable from its reference. Therefore, evaluation determines how words function in texts, collocating with each other and fixating similar types of human experience in stable linguistic patterns or frames (Lukjanova, 2004).

The evaluative potential of a word is reflected in its integral category (IC), which represents the basic features of human experience associated with this particular linguistic form (Smirnova, 2018; Tolochin et al., 2014). The IC manifests itself in all instances of the word's usage and is the gravitational centre that determines the whole structure of the word's polysemy. In each particular situation, a word's IC is specified by establishing stable connections to other functionally similar linguistic items. Thus, by looking at the lexical markers that surround the word in different texts, typical collocational patterns can be distinguished that can be used as a basis for sense distinction. This approach has been applied to several lexical items and has proved to be effective in lexicographic description (Smirnova, 2016a; Smirnova, 2016b; Smirnova & Tolochin, 2018; Tkalich & Tolochin, 2018; Vlasova & Tolochin, 2019).

In this study, 603 uses of the word *awe* were analysed; 459 cases from 430 websites were taken from a random sample extracted automatically for the noun *awe* from the iWeb,<sup>2</sup> a 14-billion-word corpus containing webpages from 94,391 websites (Davies, 2018); 144 additional cases (80 extracts of 8,804 words from 1968–2021) were retrieved manually using keywords from Google Books, which is a digital database of books and magazines.

First, all of the texts were examined to distinguish lexical markers that accompany the word *awe* in different situations. These lexical markers were then classified according to their evaluative potential, and typical patterns of their co-occurrence were established to enable differentiation between different kinds of *awe* experiences.

In the last part of this research, quantitative methods of analysis were used to determine the relative statistical importance of the established contextual domains for *awe* in modern English.

#### THREE TYPES OF TRANSCENDENTAL AWE

In studying contexts, it was concluded that the word awe has an ambivalent IC: the possibility of experiencing a complete dissolution of personal will on contact with a powerful force that transcends the boundaries of human understanding, which imparts either the feeling of eternal bliss (if oneness with the perceived force is desired) or paralysing fear (if oneness with the force in question is perceived as an overwhelming threat).

The term *archetype* has been used to refer to words with ambivalent ICs (for a detailed discussion of archetypes, see Smirnova (2016b) and Smirnova and Tolochin (2018). Archetypes tend to have a threefold sense structure because the ambivalent evaluative potential of their IC allows for three distinct patterns of its manifestation in texts: *ambivalent* (if the IC is revealed to the full extent), *positive* (if ambivalence is removed in favour of the purely positive features of experience) and *negative* (in cases when only negative aspects of the IC appear in the text). Specific examples of how this idea applies to the analysis of *awe* are outlined below.

#### AMBIVALENT AWE

His skull shifted to accommodate the *long jaws heavy with thick fangs*. His *fierce eyes sparkled*... their *primal intensity was increased*... His *magnificence* was amplified... *Frozen in a stupor of awe*, the musicians watched their guardian. They *had no fear* of their friend, but the sight of him left all three men *in a subservient heap upon the ground*. The acolytes... *collapsed in terrified astonishment*... in the presence of one who *straddled the boundaries of humanity and a wild sacred past*. (Falbe, 2014) – 1

The churning vortex towered over the small boat... Evvie was paralyzed by a pervasive sense of helplessness that took every emotion from her except that of stupefying awe. The maelstrom drifted back... She only stared, a frog before the weaving serpent, unable to acknowledge any other thing, not even terror... She looked only at the majestic violence that tied sea to sky... She was alone with the beautiful monster that was probably God. (Brandon, 2000, p. 93) – 2

...rather a healthy fear of God's awesome love, of our ability to turn our backs on this love, and of God's rightfully angry response... we have a God who creates the world out of love... How can we not be filled with awe, with fear and trembling at such powerful love? And should we not, metaphorically speaking, fall on the ground... overcome with fear at this mighty voice that commands us to love others? ...let us ponder this dazzling, awesome God. Let us remember that the God of glory and the God of the cross... (Dreyer, n.d., p. 39)

The first two extracts are fictional representations of an encounter with a powerful force that transcends the boundaries of ordinary human experience: (1) describes the supernatural process of transforming from a human being into a werewolf; (2) depicts the scene of witnessing a powerful natural phenomenon – a maelstrom; (3) is taken from a religious text and deals with the power of God's love. Despite the apparent difference like the force that induces the transcendental experience in each of these cases (supernatural, magic in (1); natural in (2); supernatural, religious in (3)), the human reaction to the encounter is described in functionally similar terms as an absolute submission to the extraordinary experience and total paralysis of personal will: frozen in a stupor, in a subservient heap, collapsed (1); paralyzed by a pervasive sense of helplessness, a frog before the weaving serpent (2); fall on the ground... overcome with fear (3). The force itself is described in both positive and negative terms as presenting a serious threat and being fascinating at the same time: thick fangs, fierce eyes magnificence (1); violence, monster – majestic, beautiful (2); angry, dazzling – powerful love, glory, awesome (3). In such cases, close contact with the force in question is both desirable and terrifying, whereas a total oneness may lead to the violent annihilation of the perceiving self (being devoured by a werewolf (1) or a maelstrom (2) or consumed by God's powerful love, which induces healthy fear and trembling (3)).

Most texts of this type represent descriptions of close contact with something sacred (straddled the boundaries of humanity and a wild sacred past (1)). They are related to the notion of numinosity, defined by Otto (1958) as a simultaneous experience of fascination and terror when in contact with the holy. This primordial awe is so anchored in the human psyche that even instances of ambivalent transcendence induced by natural phenomena evoke the idea of God's presence (the beautiful monster that was probably God (2)).

As we can see, in this type of text, the IC of the word *awe* is revealed to its full extent. Therefore, we suggest considering this kind of usage as **SENSE I.**<sup>3</sup>

#### POSITIVE AWE

I trembled under all that knowledge. The world of the embryo, of the soul, of the human being, miracles they were! How thankful I could be already to the Creator... and I felt awe, a heartfelt awe for God. Was I waking up? Was something beginning to change in me?... How overpowering was the Creator... And I was just like everybody else, godly? It was incomprehensible and impossible to feel... Was this the great and mighty happiness that was waiting for me? (Rulof, 2000, p. 173) – 4

...I discovered a solitary white candle... I stared in *quiet awe* and disbelief at the forgotten candle *diligently sending out a beacon of hope in my hour of darkness*... I felt like this dark emptiness would never be lit up or *feel the warmth of happiness* again... I gazed down at *the beacon of hope and light God had left for me*... I was in *awe* of how one simple *little flame of promise* had been left for me to discover *a newness of life*... *God had not forsaken me*. (Murchison, 2012, p. 126) – 5

Suddenly the Peace Stone began to glow... A feeling unexpectedly came over her of *utter peace and tranquillity*. She sighed sitting back on the bench *in a relaxed position*. She stared in *awe* at the stone... She didn't believe that she'd ever felt *so awe-inspiring* as a human being. *She'd never felt like this before*. (Watt, 2009, p. 123) – 6

As we can see, the nature of the force described in these extracts is quite similar to the examples discussed in the previous section: (4) and (5) represent moments of spiritual awakening through the feeling of close contact with the power of God (supernatural, religious); (6) describes the emotional change induced by a magic stone (supernatural, magic). However, the human reaction to the unfathomable force in question is radically different – it is described in exclusively positive terms as a moment of utter peace and joy: thankful, great and mighty happiness (4); a beacon of hope, the warmth of happiness (5); utter peace and tranquillity, in a relaxed position (6). These moments of peaceful transcendence via elevated emotions, such as love, gratitude and happiness, are perceived as a deep life-transforming experience that brings hope and new understanding: Was I waking up? Was something beginning to change in me? (4); the beacon of hope and light God had left for me, a newness of life, God had not forsaken me (5); She didn't believe that she'd ever felt so awe-inspiring as a human being. She'd never felt like this before (6). In this context, the transcendental oneness with the power in question is a moment of bliss that relieves one's ego of the burden of suffering.

The ambivalent IC of the word *awe* is neutralised here in favour of its positive evaluative potential. As a result, *awe* collocates with words that represent only positive aspects of a human experience. The contact with the supernatural force does not produce a tumult of contradictory emotions but is perceived as a powerful manifestation of love, peace and joy that triggers an important shift in the person's value system. Therefore, we suggest considering this type of usage as **SENSE II**.

#### **NEGATIVE AWE**

...in the now-distinct *snout* there appeared to be *small eyes*, and *nostrils*, and a mouth that could swallow one whole, ... If I could have closed my eyes and accepted whatever fate was to bear. I would have done so. But I could not. My eyes were not my own now but rather ungoverned emissaries of an unwelcome message... the terrible Beast paused not twenty yards from the Yankee's dugout... I watched in awe as it likewise raised its monstrous alligator tail... To my utter horror, now was evident droot, thick and creamy... flowing from the half-

open crevice that was the Beast's mouth... I watched, captivated... Yank... Thump... fearing for their lives... The Yankee's terrified screams... followed by a gurgling sigh that was the rupturing of all the Yankee's internal organs, the God-forsaken memory of which I can never relinquish. I closed my eyes and tried to block the sounds of the Yankee's terrible demise... trembling in mortal fear for my life, and ashamed that I could do no more. (Allred, 2006) – 7

You hear *shouts of terror*, calling you a *monster* ... You slip your wand into your pocket... a silent prayer causing a bolt of lightning to erupt into existence in your empty hand. You can hear people expressing confusion and awe... (Spacebattles.com, 2016) – 8

To the hill tribes... the buttressed paldao trees once represented a trunkful of horrors. They viewed the trees in fear and awe because they imagined that frightful things, such as armies of evil spirits, hid in the nooks and crannies. (Wood Magazine, para. 3) - 9

These contexts depict encounters with an overpowering force similar to the previous groups: a terrible wild beast (7); a powerful sorcerer (8); armies of evil spirits (9). The distribution of contexts is also the same as in previous sections: natural phenomena (7); supernatural, magic (8): supernatural, religious (9). The main difference lies in the subject's evaluation of the nature of contact with the force in question. In this type of context, the moment of transcendence is induced by a threat so overwhelming that it takes full control of one's senses, leading to the dissolution of personal will and the total incapacity of the subject to react physically to the terrifying stimulus: My eyes were not my own now, but rather ungoverned emissaries of an unwelcome message; captivated; the God-forsaken memory of which I can never relinquish (7). In contrast to ambivalent awe, the awe-inspiring agent in these contexts has no positive characteristics whatsoever and is described in exclusively negative terms. For example, the alligator in (7) is not a magnificent godlike creature (compared to the maelstrom in (2)) but a terrible beast, disgusting and repulsive in its appearance: monstrous alligator tail, evident drool, thick and creamy... flowing from the half-open crevice that was the Beast's mouth (7). The human reaction to the overpowering force is also purely negative and is associated with a range of other negative emotions, such as fear, shame and confusion: to my utter horror, tried to block the sounds of the Yankee's terrible demise, trembling in mortal fear for my life, ashamed that I could do no more (7); terror, confusion (8); fear, horrors, frightful (9).

In summary, the transcendental experience of self-diminishment or the total dissolution of the self when faced with an overwhelming threat is described in exclusively negative terms, which creates a specific collocational pattern for the word *awe* and associates it with other negative emotive words. Therefore, this type of usage can be considered **SENSE III**.

All of the contexts discussed above represent instances of transcendental experiences induced by contact with an overwhelmingly powerful force. The main difference lies in the subject's evaluation of the nature of the contact, which can be ambivalent, positive or negative. However, there are other cases when the word *awe* describes less intense emotional experiences while simultaneously retaining an overall evaluative attitude. We will consider these as metonymical extensions.

#### MUNDANE AWE: METONYMICAL EXTENSIONS

Though my parents did administer Godly discipline, I was never terrified of them. My parents were not monsters, and I never anticipated danger for my life... I feared them because I had such reverence and **awe** for them that I did not want to disappoint them. I was afraid of breaking their hearts... I had... great respect for them. They are a valued part of my life. We should live our lives in such a manner that people will revere us... It should be an admiring fear. (Noble, 2009, p. 40) – 10

...Tarkovsky and Bergman were *huge admirers* of each other's work, to the point of *awe*. So much so that... they *never met even when they had offices in the same building* in Stockholm... they "avoided one another out of shyness". (Totaro, 2004, para. 5) – 11

In these two extracts, ambivalence is maintained but on a slightly different level of intensity. On the one hand, the ecstatic fascination that induces a trance-like state is replaced here with admiration and reverence that does not trigger feelings of self-transcendence: *such reverence, great respect, a valued part of my life, revere, admiring* (10); *huge admirers* (11). On the other hand, the negative aspect of this kind of experience manifests itself in feelings of fear (which is less intense than SENSE I and does not border on terror) and shyness: *I was never terrified of them, I never anticipated danger for my life, I was afraid of breaking their hearts, feared them* (10); *they never met even when they had offices in the same building, avoided one another out of shyness* (11). In this type of situation, the awe-inspiring agent is not a powerful transcendental force that is beyond human comprehension but rather a real person or social institution belonging to a higher rank of social or professional authority. Therefore, the threat is less frightening because it remains within the confirmed frame of reference. We suggest considering this type of usage as a metonymical extension of SENSE I (see SENSE 1.1 in the appendix).

...their fans were left in *awe* and *admiration* at the style of play... the *stunning performance* against Donegal... the *surge of scores*... against Kerry... remember *the sense of joy* as you watched it all unfold. (Murphy, 2016, para. 8) - 12

Ryan should receive an award... for his *amazingness*. I can write a book on everything that had me in *awe*... He took *excellent* care of the car, returned it *better* than received... I am *beyond appreciative of*. I think *we need to add a*  $6^{th}$  *star*! (Tia, 2017) – 13

In (12) and (13), the moment of awe is described as a purely positive experience: admiration, the stunning performance, the sense of joy (12); amazingness, excellent, better, I am beyond appreciative of, we need to add a 6<sup>th</sup> star (13). This kind of experience, however, does not imply spiritual awakening as in SENSE II; therefore, the subject does not transcend personal limitations and no serious restructuring of one's value system follows. As a result, this type of usage can be considered as a mundane variant of SENSE II (see SENSE 2.1 in the appendix).

The Pharisees *tried to trap* Jesus with their questions, which Jesus always answered in a way that *humiliated them*, left them *angry* and *silent*, and *sent a shock of awe* through the crowd. (Johnson, 2012, sect. 3, para. 2) – 14

The *shock* on your face *would send a grown adult into hysterics*. It was *bad enough* they made you sit there for... SIX hours downloading the game, but then they had the nerve to cover up *such crappy art* with such a gorgeous intro!... you stare in *awe* at what appears on your screen. (Enigma, n.d., para. 8–9) – 15

In these texts, *awe* is associated with negative emotions, such as shock, anger and humiliation: *humiliated, angry, silent, a shock of awe* (14); *The shock on your face would send a grown adult into hysterics, bad enough, such crappy art* (15). The overwhelming physical threat that paralyses the subject is reduced here to a serious threat to the subject's value system, which induces feelings of shock, bewilderment and resentment, but does not incapacitate the subject and causes no serious damage to the person's psyche in the long run. We are going to consider such instances of usage a metonymical extension of SENSE III (SENSE 3.1 in the appendix).

# QUANTITATIVE ANALYSIS OF THE CORPUS SAMPLE

For quantitative analysis, a random sample of 500 concordances was extracted from iWeb.<sup>4</sup> We had to eliminate 41 concordances where the word *awe* was used as a homonymous

abbreviation or as a proper noun, which left a total of 459 cases. All concordances were analysed according to collocational patterns (Table 1) and manually labelled as one of the above-mentioned senses:

% Senses Number of cases % 12 18.9 Sense I (transcendental, ambivalent) 32 6.9 1.1 (mundane, ambivalent) 38 8.3 Sense II (transcendental, positive) 72.6 295 2.1 (mundane, positive) 64.3 Sense III (transcendental, negative) 18 3.9 8.5 1.3 (mundane, negative) 21 4.6 100 100 **TOTAL** 

TABLE 1. Breakdown of the senses of the noun awe

Table 1 shows that positive *awe* is the most frequent type of awe experience in the sample (72.6% of cases), with its mundane metonymical extension (Sense 2.1) representing more than half of the analysed instances of use (64.3%). This overwhelming frequency of positive variants may explain the focus on *awe* as a purely positive emotion in psychological studies.

The ambivalent senses are more frequent than the negative senses (18.9% and 8.5%, respectively), which indicates that the positive evaluative potential of *awe* within IC is very strong in the English language and is rarely eliminated from the context in favour of the negative emotional charge. Nevertheless, negative senses are statistically important, and the role of purely negative awe experiences in English still merits further investigation.

It should also be pointed out that transcendental *awe*, as an intense life-transforming experience, gives way to mundane (or ignorant in Pearsall's terms)<sup>5</sup> *awe* (24.2% vs 75.8%, respectively). This indicates that the word *awe*, which initially described the 'primordial' emotion of contact with the holy (Kearney, 2002, p. 88), undergoes the process of secularisation and is less frequently used nowadays as a marker of a transcendental experience.

## **DISCUSSION**

This study has several important implications for both psychology and lexicography. First, it shows that different features of awe experiences cited in academic literature do not combine randomly but co-occur in typical evaluative patterns. This fact supports Gordon et al. (2017) and Pearsall (2007) who found that different variants of *awe* exist. Contrary to their conclusions, we suggest that *awe* has a more discrete structure, and threat-based *awe* is further subdivided into two distinct categories of ambivalent and purely negative awe experiences. The conflation of all threat-based cases of *awe* into one category might be explained by the relative infrequency of purely negative *awe* as well as by the overall aim of psychology, which is to study factors that contribute to wellbeing. Nevertheless, the study of the negative contexts of *awe* might be important for better understanding acute traumatic experiences and finding a means of relieving post-traumatic stress disorder. However, it must be admitted that this kind of experience cannot be induced in an experimental study for ethical reasons, and, therefore, a more linguistically based approach is welcomed.

Secondly, another important implication relates to the notion of vastness, initially proposed by Haidt and Keltner (2003) as one of the central features of *awe*. The analysis of the linguistic data supports the idea that all stimuli that trigger *awe* are characterised by vastness, although to a slightly different degree. The vastness of God or a mighty natural phenomenon is incomparable to the vastness of a new supermarket or an impressive mobile device. If the

first induces the transcendental experience of going beyond the boundary of ordinary human perception, the second leaves the subject within the confirmed frame of reference. Therefore, I suggest distinguishing between transcendental *awe* as a spiritual experience and mundane *awe* as its down-to-earth version. By the word *spiritual* I understand a variety of transcendental experiences of being in contact with an unfathomable force and not necessarily those that are religious. Atheistic spirituality, which is based on the wonderment of the deep mysteries of the natural world, is also perceived as a transcendental experience of oneness with the incomprehensible powers of the Universe, triggering a transcendental sense of *awe* (Shapiro, 2018).

This distinction might be important in the sphere of positive psychology when both positive variants are sometimes conflated and studied as the same emotion. Do cases of positive transcendental *awe* as moments of spiritual awakening have the same impact on the quality of life and personal wellbeing as simple everyday moments of fascination? Do they manifest themselves in the same physiological reactions? The analysis of the linguistic markers in the texts describing these experiences suggests the existence of profound differences in the perception of these emotional states. However, this finding needs further experimental investigation.

The noun *awe* in lexicography is treated as a monosemous word that denotes an ambivalent emotion of respect mixed with surprise and fear, but the analysis does not support this vision of the sense structure of the word. The analysis of lexical markers in context indicates distinct collocational patterns that differ significantly in their functional and evaluative characteristics. The idea of respect, which is considered central in the abovementioned dictionary entries, is not as prominent and manifests itself only in one of the metonymical extensions (SENSE 1.1). The other cases of usage are related to the juxtaposition of fascination and terror, which does not come across in modern dictionaries.

In the use of *awe* on iWeb, in most instances, the elements of fear are absent, and 72.6% of the cases describe positive emotional states. The results of the recent experimental studies in psychology also suggest the existence of several distinct variants of *awe* that manifest themselves in different physiological reactions (Gordon et al., 2017). Therefore, it would be more consistent to consider the word as having a polysemous sense structure based on two major distinctions: *the evaluative attitude of the perceiving self (ambivalent, positive, negative)* and the type of vastness of the perceived stimulus (overwhelming unfathomable vastness that induces the feeling of transcendence vs more finite comprehensible vastness that leaves one within the usual state of consciousness).

This article adds to the emerging body of work on linguistic archetypes and presents additional evidence that ambivalence exists at the semantic level of word meaning (Stamenov, 2011). The method of contextual analysis proposed by Tolochin (2014) seems to be an effective way of distinguishing words with ambivalent ICs and establishing their sense structure. This study supports the initial hypothesis that words with ambivalent ICs tend to have three main senses following three typical patterns of contextual disambiguation: 1) *ambivalent*, which is the legacy of the archaic syncretism of the ancient human mind, 2) *positive*, and 3) *negative*, an outcome of the detachment of opposite evaluative attitudes due to the growing analyticity of modern languages. The data analysed in this paper demonstrate that taking the property of archetypes into account might help improve the lexicographic description of many English words.

#### CONCLUSION

This study presents a linguistic contribution to 'the emerging science of awe' (Gordon et al., 2017, p. 324). We have tried to demonstrate that descriptive tools of linguistic analysis may shed new light on this controversial emotion, revealing features that have been overlooked in experimental studies because of their largely prescriptive research design.

Alternatively, the empirical data collected during psychological experiments may be useful when compiling dictionary entries devoted to the description of emotive words. Important differences in physiological reactions to various situations described as awe-related experiences indicate that the word *awe* is used in the English-speaking world to refer to different emotional states. These emotional states may be considered variants of awe experience that are fixated in specific word senses and revealed in the distinct collocational patterns of the context.

This study also indicates that the central role of language in encoding emotional experiences may be useful for psychology. Emotional experiences are made accessible to human consciousness across languages (Fishman, 1982; Whorf, 1956). The question arises whether the English word *awe* used as a term in psychological studies can be isolated from the contextual patterns that the word has established in modern English. Also, whether similar emotional experiences expressed in other languages will form the same groupings that could be adequately termed using the English word *awe* remains unknown. In summary, this approach may lead to the mutual incorporation of the two disciplines, contributing to a better understanding of awe-related experiences in psychology and simultaneously allowing an adequate representation of the polysemy of the word *awe* in English lexicography.

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#### **ENDNOTES**

- 1. For a similar approach to word meaning, see Cadiot and Visetti (2001) and Pauly (2014).
- 2. iWeb is one of the largest and most recent corpora of English.
- 3. See Appendix I for definitions.
- 4. I chose not to take examples from Google Books into account to avoid genre bias that might favour certain word senses. Corpora are created systematically and cover a wide range of speech genres (including newspaper articles, online forums and blogs). Therefore, using only iWeb examples for quantitative analysis allows us to obtain a more balanced picture of how *awe* is currently used in the English language. However, examples from Google Books are very useful to clarify certain aspects of word meaning, especially for less frequent senses that are not sufficiently represented in the iWeb sample.
- 5. We prefer the term *mundane* because it does not presuppose any qualitative inferiority of the experience but rather describes its functional difference.

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#### APPENDIX 1

#### DICTIONARY ENTRY FOR THE WORD AWE

AWE, N [U]

**Integral category:** the possibility of experiencing the feeling of complete dissolution of personal will on contact with a powerful force that transcends the boundaries of human understanding, which imparts either the feeling of eternal bliss (if oneness with the perceived force is desired) or paralysing fear (if oneness with the force in question is perceived as an overwhelming threat).

- **SENSE I (transcendental)**: the simultaneous experience of ecstatic fascination and terror in situations of close contact with a powerful unfathomable force whose overwhelming splendour is regarded as a potential threat to the perceiving self (God, agents endowed with magic powers, and mighty natural phenomena).
- **SENSE 1.1 (mundane)**: high esteem and reverential fear of supreme authority (a parent, king, and manager).
- **SENSE II (transcendental)**: the overpowering sense of love, admiration, and comforting joy in contact with a mysterious life-giving force, perceived as a life-transforming experience (God, agents endowed with magic powers, and powers of the Universe).
- **SENSE 2.1 (mundane, the most frequent)**: the feeling of excitement and fascination at something extraordinary (picturesque landscapes, talented people, and cutting-edge technology).
- **SENSE III (transcendental, rare)**: the feeling of terror and absolute helplessness at a threat so overwhelming that it paralyses one's senses (evil spirits, agents endowed with magic powers, destructive natural phenomena, and war).
- **SENSE 3.1 (mundane, rare)**: the feeling of shock, disappointment, and fear of something that seriously threatens the established value systems (an enemy and bad news).