

The Beautiful, the Sublime and the Self

Margherita Arcangeli, Jérôme Dokic, Marco Sperduti

▶ To cite this version:

Margherita Arcangeli, Jérôme Dokic, Marco Sperduti. The Beautiful, the Sublime and the Self. Florian Cova; Sébastien Réhault. Advances in Experimental Philosophy of Aesthetics, Bloomsbury Publishing, pp.175-196, 2018, Advances in Experimental Philosophy, 9781350038844. 10.5040/9781350038950.ch-009. hal-03907114

HAL Id: hal-03907114 https://hal.science/hal-03907114

Submitted on 19 Jan2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

9

The Beautiful, the Sublime and the Self

Margherita Arcangeli, Jérôme Dokic and Marco Sperduti

The sublime emerges in the history of philosophy as the object of an aesthetic experience very often contrasted with the aesthetic experience of the beautiful. While the latter experience is mainly positive and pleasurable, the former experience is characterized by ambivalent feelings. On the one hand, the sublime involves an overwhelming vastness, or power, which disturbs and unsettles. On the other hand, the sublime poses a challenge, which is enlightening and elating. The overall experience of the sublime is also frequently associated with the feeling of the insignificance of human life, of our smallness compared to the *grandeur* we are confronted with. In the light of recent psychological and neuroscientific studies, we claim that the sublime gives rise to an aesthetic experience that, contrary to the experiences are immersive and tend to blur the distinction between the self and the world. Our claim has implications for a vexed question about the sublime, namely whether it is restricted to natural scenes or extends to artworks. We suggest that in favourable conditions, art can elicit sublimity experiences. We then offer a roadmap to test our claim within an experimental setting, with special focus on music and virtual reality devices to deal with the immersive character of sublimity experiences.

1. Introduction

Our aesthetic relationship with the world is variegated. Sometimes we have a pleasurable experience in admiring a flower or a beautiful face, painted or real. In other cases, our aesthetic experience involves more negative feelings. Philosophers have drawn a distinction between beauty experiences,

which are about beautiful (artefactual or natural) entities, and sublimity experiences, which confront us with an overwhelming vastness, or power, which disturbs and unsettles our mind.¹ In this paper, we investigate into the nature of sublimity experiences as a sub-class of aesthetic experiences. In §2, we rehearse venerable philosophical insights about sublimity experiences and what differentiates them from beauty experiences. In §3, we survey recent empirical work about sublimity experiences, in psychology and neuroscience. While philosophers have observed that the sublime is intimately connected to the self, empirical findings suggest that sublimity experiences involve suppressed or at least diminished self-awareness. In §4, we suggest a way out of this puzzle. In our view, the contrast between sublimity and beauty experiences is related to the way the subject's self is involved in each kind of experience. We argue that while the sublime is in fact a relational property involving the self, it is experienced in a way which blurs the boundary between the self and the world. In other words, sublimity experiences are necessarily immersive in a way in which mere beauty experiences are not. In §5, we examine an important consequence of this view for the question of whether artworks are apt to trigger sublimity experiences in addition to natural scenes. While some authors have given a negative answer to this question, we argue that an immersive experience of the sublime is possible with respect to an artwork, provided that the latter is presented in favourable conditions. In the concluding section, we offer a preliminary roadmap for experimentally testing our hypothesis about the immersive nature of sublimity experiences.

2. The sublime and the beautiful: philosophical insights

Consider the wrath of the sea with its waves flung against the cliffs, the panoply of the stars in a clear night sky, the majesty of a few hundred years old tree, or the apparent calm of the endless desert. In those circumstances, we can undergo a peculiar experience, which may involve a mix of fear and admiration, struck by what reminds us that we are just human beings, animals among other

animals, living on a small planet. This is what we call "the sublime". It seems that not only natural scenes, but also human creations can elicit sublimity experiences. This would be the case, when, for instance, we contemplate the greatness of the Pyramids of Giza, we stand underneath (or on top of) an impressive dam, or even when we grasp the deep meaning of the special relativity.

Can we give a more precise definition of what the sublime is? Since classical antiquity at least, philosophers have offered various definitions. A point of agreement is that the sublime gives rise to an aesthetic experience. However, while firstly attention was paid to the sublime as a rhetorical style, which mirrors the divine madness that inspired the author and is able to carry away the audience, at a later time the focus became the sublime as the object of an aesthetic experience due to emotional contact with an overwhelming vastness or power.² Focusing on the latter way to understand the sublime, we can try to go further and delineate a cognitive pattern (involving sensory, attentional, emotional and intellectual aspects) underlying sublimity experiences. Since this pattern involves both negative and positive aspects, the experience of the sublime turns out to involve ambivalent feelings.

On the one hand, there is a negative aspect to the sublime. It involves a confrontation with something that overwhelms us, in size (as a few hundred years old tree or the Pyramids of Giza), scope (as the panoply of the stars or the special relativity) or power (as the wrath of the sea or an impressive dam). Such a mind-boggling encounter disturbs and unsettles, due to the greatness we are confronted with. Very often philosophers have talked about an experience of fear, though there may be no real danger (for a nice review, see Cochrane 2012). It is as if we could foresee a potential danger. The wrath of the sea might turn against us, as well as the dam might crack and provoke a disaster and we might lose ourselves in the endless desert. It is not straightforward why we should talk about fear in other cases. When the panoply of the stars or a few hundred years old tree fills us with a sublimity experience, it does not seem that we fear that, for instance, the stars or the tree could fall over us. Similarly in the case of the Pyramids of Giza or the grasping of the special

relativity it is not clear what should be the potential danger. Yet, in these cases we may still talk about a negative aspect. We are confronted with something greater, in time or space, than us - at least in the stars, the tree and the pyramids cases. A sense of smallness may arise and perhaps we may even feel the insignificance of human life. In the special relativity case, we are facing an overturning of our ordinary way of thinking about time and space, which can be wilder us. It might also be that we experience our smallness compared to the genius who could achieve such a conceptual revolution.³

On the other hand, the sublime has a positive aspect. The mind-boggling encounter is enlightening and elating, due to the challenge it poses to our mind, which is prompted to cope with such a *grandeur* even beyond its own power.⁴ As Joseph Addison wrote: "Our Imagination loves to be filled with an Object, or to grasp at any thing that is too big for its Capacity" (*The Spectator*, No 412). In sublimity experiences, our senses, intellect and imagination have to handle, for instance, immense expanses, myriads of objects, overpowering forces, and astonishing achievements. It has been underlined that such experiences seem to disclose new levels of reality or knowledge. The experience of the sublime might reveal supernatural values, as Kantian philosophy suggests, or the essence of the universe and the natural forces that govern it, as it emerges in Schopenhauer's view of the sublime (Schopenhauer 1819/1844). The German term for "sublime" is precisely "*Erhabene*", which is etymologically tied to the noun "*Erhebung*" meaning elevation. Unsurprisingly sublimity experiences have been associated with spiritual or mystical experiences.

Notwithstanding the double aspect (positive and negative) of sublimity experiences, arguably their overall valence is positive. By "positive valence" we do not mean that sublimity experiences are pleasurable, although Kant stressed that the sublime seems to give rise to a kind of pleasure "that is only possible by means of a displeasure" (Kant 1790, §27). We mean that sublimity experiences involve what Prinz (2011) calls "appetitive dispositions"; they are the kind of experience that we want to sustain and seek out. This is arguably a symptom of the fact that sublimity

experiences are aesthetic experiences just like beauty experiences (see Dokic 2016 on the selfsustaining or "autotelic" character of aesthetic experiences).

Nevertheless, most of the philosophers interested in sublimity experiences have contrasted them with beauty experiences. The latter concern things, such as a smiling face, a colourful flower or a peaceful countryside landscape, which seem quite different from the objects of sublimity experiences. More generally beauty experiences may arise when we encounter something that is smaller in size, scope or power than what we typically face in sublimity experiences.⁵ Several features have been put forward in order to capture what provokes beauty experiences, for instance, delicacy, smoothness, proportion, fragility, harmony (for recent discussion see Scruton 2009 and Levinson 2011). Here we do not need to take a stance on this issue. It suffices to stress that beauty experiences lack the overwhelming aspect present in sublimity experiences. Thus, the former lack the negative aspect shown by the latter (although they can have other negative aspects: in cases of "difficult beauty", there is dissonance, but it eventually leads to resolution). We do not feel disturbed and unsettled when staring at a colourful flower, which strikes us with beauty. There is no potential danger in beauty experiences, which are mainly positive and pleasurable. Such experiences are delighting and invigorating, and we can also talk about reward and satisfaction.⁶

The cognitive patterns associated with sublimity and beauty experiences just outlined are prima facie compatible with different views about their nature and mutual relationships. An important issue is whether sublimity and beauty experiences are compatible. Even though they are different types of aesthetic experience, we may ask whether there are token experiences that belong to both types at once. On one view, the answer is negative: the experience of the sublime excludes the experience of the beautiful, and vice versa. When we have an aesthetic experience about something, we experience it as being either about the sublime or about the beautiful, but not both. Another view is that these kinds of experience are co-possible. Some aesthetic experiences are about both the sublime and the beautiful. Many would agree that there are beauty experiences that are not sublimity experiences. A further question is whether all sublimity experiences are also about the beautiful.

Another issue is whether the sublime and the beautiful are experienced as coming in degrees. It seems that we can experience something as being more beautiful than another thing. The matter is more controversial in the case of the sublime. Schopenhauer (1819/1844, §39) has argued that we can also experience something as being more sublime that another thing. However, many philosophers, including Kant and Burke on some interpretations (see Brady 2013 for discussion) have considered sublimity experiences to be limit-experiences, which seems to imply that we do not experience the sublime as a gradual phenomenon.

We do not need to take a definite stance on these issues here. It is enough for present purposes to hold the idea that the sublime and the beautiful give rise to different cognitive patterns as just sketched. Some aspects of these patterns can be retrieved in recent studies addressing these experiences from psychological and neurobiological points of view.

3. Psychological and neurobiological perspectives

There is no specific theory or experimental study (with the notable exception of Ishizu and Zeki 2014; see below) on the sublimity experience in the psychological domain. Nevertheless, the emotion of awe can be considered a close construct that has aroused a certain interest in psychology and is worth mentioning here. Indeed, in their comprehensive review on awe in various theoretical domains (e.g., psychology, philosophy, religion, and sociology), Dacher Keltner and Jonathan Haidt (2003) explicitly mention the connection between awe and the philosophical concept of the sublime, especially as defined by Edmund Burke (1759). They propose as prototypical aspects of awe vastness and need for accommodation, which echo power

and obscurity (in the metaphorical sense of being difficult to grasp by intellect) in Burke's definition of the sublime. Several aspects of their definition of awe (which are clearly in line with the cognitive pattern associated with the sublime as sketched in §2) can help us in advancing our discussion of the sublimity experience.

As we already seen, the sublimity experience can be characterized by ambivalent emotional reactions. Keltner and Haidt (2003) suggest that the emotional valence of this experience could depend on two different factors. Firstly, since awe is elicited by informationally rich and possibly novel stimuli that call for accommodation, the experience could be pleasant or unpleasant depending on the success of the accommodation. The authors also suggest that beyond the two prototypical characteristics, other factors could "colour" the experience of awe. Among these is the threatening aspect of the stimulus eliciting awe. Indeed, a volcano eruption and a wonderful sunset would probably elicit awe experiences of completely opposite valence.

Keltner and Haidt's model is also interesting in its contribution to the question of whether the sublimity experience can be elicited by artworks (see §4 and §5 below). As mentioned above, they identify additional appraisal themes that can "colour" awe experiences, among which is beauty. They state that beautiful stimuli "can produce awe-related experiences that are flavoured with aesthetic pleasure" (p. 304). Interestingly, they are open to the hypothesis that among the different types of artwork, music can elicit a genuine awe experience as compared with painting, which would lack the two fundamental features (vastness and accommodation).

If we now turn to neuro-aesthetics, we find that the experience of the beautiful has been the elected subject of research of most studies. Indeed, the majority of the works investigating the neural correlates of aesthetic experience have employed judgement of beauty, pleasantness or attractiveness of different kinds of stimuli (e.g., visual artworks, music). Even if this approach has probably conflated aesthetic experiences and beauty experiences, it has produced abundant data giving some insights worth discussing here.

7

Judgement of beauty has been repeatedly reported activating medial prefrontal cortex, encompassing both the medial orbito-frontal cortex (mOFC) and the rostral anterior cingulate cortex (rACC), for paintings (Kawabata and Zeki 2004, Ishizu and Zeki 2011, Vassel, Starr and Rubin 2012), music (Ishizu and Zeki 2011), and even for mathematical beauty (Zeki, Romaya, Benincasa and Atiyah 2014). The pivotal role of the mOFC has been supported by a recent metaanalysis of neuroimaging studies (Brown, Gao, Tisdelle, Eickhoff and Liotti 2011). Indeed, positive aesthetic judgement about stimuli from different sensory modalities (vision, audition, gustation and olfaction) recruited partially overlapping portions of this brain region. Reviewing the extensive literature on the mOFC is beyond the scope of the present paper. Moreover, a consensual explanation of the function of the mOFC that can take into account its implication in disparate cognitive functions has not yet been put forward (for a critical review see Stalnaker, Cooch and Schoenbaum 2015). It suffices to state here that one of the proposed functions linked to this region is tracking the reward value of stimuli. This has led some authors to the speculative proposal that aesthetic judgement could have co-opted the more ancient evolutionary function of forage valuing implemented in this structure (Brown et al. 2011).

One interesting consequence of delineating the neural correlates of the beauty experience is that we can, in principle, compare them with those of the sublimity experience and sketch the relationship between these experiences at the brain level. Nevertheless, to our knowledge, there is only one study directly investigating the neural correlates of the sublimity experience, namely that of Tomohiro Ishizu and Semir Zeki (2014).

The authors asked participants, in a pre-scanning session, to rate on a five-point scale the "sublimity" of pictures containing elements supposed to elicit this experience (volcanoes, tornadoes, ocean waves, etc.). Thus, for each participant 35 pictures belonging to each of the five sublimity levels were selected and presented while neural activity was recorded using fMRI. After the scanning session, participants were asked to rate the same stimuli on the beauty (ugly-

beauty), pleasantness (fearful-pleasant) and scale dimensions (small-grand).

Brain areas that showed an increased level of activity with increasing sublimity rating were located in the occipital cortex, hippocampus and basal ganglia (head of caudate and putamen). Occipital areas are expected to be activated by natural scenes, but the finding of enhanced activation with increasing sublimity level suggests that the very sensory areas responsible for processing the stimulus may code for the sublime. This could suggest that the sublime requires higher processing effort, according with the idea that sublimity elicitors should be rich in information and possibly more complex. Multiple cognitive processes engage both hippocampus and basal ganglia. The most likely explanation for their recruitment in sublimity judgement is their role in emotional processing.⁷

Interestingly, another set of structures, mainly comprising cortical midline structures (CMS, medial prefrontal cortex and posterior cingulate cortex/precuneus), showed the opposite pattern of activity (reduced recruitment with increasing sublimity rating). These structures are well known to be recruited by self-referential processing (for a meta-analysis see Martinelli, Sperduti and Piolino 2013). We have stressed that the experience of the sublime is frequently associated with the feeling of the insignificance of human life, of our smallness compared to the *grandeur* with which we are confronted. Philosophical discussions clearly point to an intimate connection between the sublime and the self, since as mentioned above they emphasize that sublimity experiences involve awareness of one's own cognitive limitations and shortcomings. Ishizu and Zeki thus expected to find an activation of these self-referential areas. As they put it:

Suppression of self-awareness would not be expected during experience of the sublime, which has been written of as leading to an awareness of one's insignificance in relation to the immensity and grandeur of the Nature. This would imply that one is aware of one's existence and insignificance during such experiences (Ishizu and Zeki 2014: 9).

Also the idea that sublimity experiences are aesthetic experiences can motivate the expectation to find an activation of these self-referential areas. Indeed, another study showed that activity in these regions was not parametrically modulated by aesthetic judgement ("How strongly does this painting move you?"), but was abruptly recruited only by the most aesthetically pleasing images (Vessel et al. 2012). However, a recent study showed that these regions are strongly modulated by familiarity (after all, what is familiar is what is already known to the self), and that judgements of familiarity and beauty are strongly correlated (Bohrn, Altmann, Lubrich, Menninghaus and Jacobs 2013). Thus, familiarity could be an underestimated confounding factor in neuro-aesthetic investigation. The idea would be that the fact that we find an activation of these self-referential areas is mainly due to familiarity and does not rule out that there are genuine aesthetic experiences which do not involve an activation of these areas, precisely because they are less tied to familiarity. This might be the case for sublimity experiences.⁸

Moreover, empirical findings suggest that awe – which is, as mentioned above, an emotion closely related with the experience of the sublime – also involves decreased self-focused attention (Piff, Dietze, Feinberg, Stancato and Keltner 2015, Shiota, Keltner and Mossman 2007).

Thus, collectively these studies suggest that the sublimity experience may be linked to an enhanced sensory processing of the stimulus (increased activity in sensory areas), and to a diminished self-focus – in tension with the philosophical importance given to the self in sublimity experiences. Concerning the relationship between sublimity and beauty experiences, these works showed that they would engage separate brain systems.

We think that while these findings undoubtedly offer precious insights into the nature of the sublime, they should be taken with caution for several reasons. Firstly, as also acknowledged by the authors, "subjects were asked about their experience of the sublime in images of natural scenes within the confines of a scanner. This inevitably limits the grandeur and depth of the experience and

of course limits our conclusions too" (Ishizu and Zeki 2014: 7).

Second, the sublimity experience is treated as a continuous experience varying in degrees, while in many theoretical approaches it is conceptualized as a peak experience (see §2). Third, subjects in the study were explicitly asked to rate the sublimity of the stimulus. Given the heterogeneity of definitions of the sublime, it is not clear how the latter is appraised in folk psychology. For example, subjects might have naïvely conceived of the sublime as one extreme of a continuum of beautiful entities. This hypothesis is supported by the behavioural results of the same study showing that sublimity ratings significantly correlated with post-scanning ratings of beauty.

The aforementioned correlation seems to suggest that the two experiences are tightly related. Arguably, like beauty experiences, sublimity experiences are aesthetic experiences. At least, they naturally feed into aesthetic judgements (although perhaps not always judgements of beauty), such as the evaluative judgement "This is awesome". Ishizu and Zeki seem to think otherwise and reserve the phrase "aesthetic experiences" to beauty experiences. Their terminological choice seems to be based on their neuroimaging findings, which did not show the recruitment of overlapping brain structures between beauty and sublimity experiences. It should be noted that this comparison was made on the basis of results concerning two different studies employing quite different material. In the study on beauty, stimuli consisted in (pictures of) paintings, while in the study of sublimity, (pictures of) natural scenes were employed. Thus, to date, no firm conclusion can be reached on this issue. (Moreover, this points again to the issue about artworks and whether they can elicit sublimity.) We think that their results are fully compatible with the ontological view that sublimity and beauty experiences are two species of the same genus, viz. aesthetic experience (although of course more philosophical work is needed to characterize more precisely the relevant genus beyond our earlier observations that aesthetic experiences have a positive valence and are self-sustaining).

In what follows we shall deal with the tension between philosophical insights and

neuroscientific findings when the role of the self in sublimity experiences is at stake. The discussion will lead to dwell on the question concerning the objects of sublimity experiences: Can a work of art really be sublime, or is this only the privilege of Mother Nature's creations? We will conclude with a roadmap for future studies to overcome the limitations we stressed here.

4. The sublime and the self

We have seen that in many respects the psychological and neuroscientific literature is in line with the philosophical literature on the sublime. For instance, both literatures depict the sublime as having a double (positive and negative) nature and stress the importance of the overwhelming aspect in sublimity experiences. However, they diverge as far as the connection between the sublime and the self is concerned. The nature of such connection may seem puzzling. On the one hand, philosophers have stressed that the experience of the sublime is frequently associated with the feeling of the insignificance of human life, of our smallness compared to the *grandeur* we are confronted with. On the other hand, neuroscientific findings suggest that this experience involves suppressed or at least diminished self-reflection. As we are going to claim in this section, there is no real puzzle here, and a proper account of how the self is involved in the experience of the sublime will give justice to both insights.

The connection between sublimity experiences and the self can be highlighted through a contrast with beauty experiences. Sublimity experiences seem to be much more self-centred than beauty experiences. The latter are rather object-centred, in the sense that the features that are responsible for the former experiences are (at least mostly) in the beautiful things themselves (e.g., the chromatic harmony of a flower, the symmetry of a sculpture, etc.). In contrast, sublimity experiences seem to result from irreducibly relational properties involving the subject's self and her immediate environment (e.g., not just the highest cliff in the Grand Canyon, but that cliff in

comparison with my smallness).

Appearances notwithstanding, the claim that sublimity experiences are self-centred is compatible with the empirical observation that they involve decreased self-focused attention. The point is that even though self-relative properties play a key role in triggering sublimity experiences, they may not be *experienced as such*. In this respect, the case of sublimity experiences is not unique. As an analogy, consider the experience of coloured objects. Even if colour is a relative property, it is not usually presented in visual perception as a relational property (see Cohen 2010). We do not see the redness of blood *as* a relational property involving blood *and* our visual system; as far as our visual experience is concerned, the only locus of instantiation of redness is blood itself. Similarly, we might argue that sublimity experiences involve an "error of attribution": when the subject experiences awe while being at the edge of the highest cliff in the Grand Canyon, she tends to consider the Grand Canyon itself as the object of her experience, without any apparent contribution of the self, while in fact it concerns herself in relation to the immediate environment.

Kant himself suggested that experiences and judgements of the sublime seem to be objectcentred but in fact concern only the human mind, as he thought a good analysis of these mental states should make clear (see, e.g., Kant 1790, §28, where he claims that sublimity "is not contained in anything in nature, but only in our mind"). Our suggestion is less radical. We agree with Kant that the apparent contents of sublimity experiences are misleading because they tend to neglect the contribution of the self, but we insist that these experiences concern both the mind and the world, and not just the mind. It has been underlined that Kant's theory is "radically subjective" (Shapshay 2014: 96), since too much emphasis is put on the subject side. Cochrane has forcefully argued contra "egoistic models" of the sublime, claiming that they ignore "the distinctly other-directedness of the sublime experience" (Cochrane 2012: 135). He favours a model in which the experience of the sublime is primarily object-centred and involves a sense of self-negation. Two remarks are in order here. First, we think that the debate gains in clarity if we observe the distinction between the ontological question of *what* sublime objects are and the phenomenological question of *how* they are presented in sublimity experiences. Sublimity experiences can be self-centred in the sense that their objects essentially involve the self but object-centred in the different sense that they seem to attribute sublimity exclusively to the environment – this is arguably Kant's view. Second, if we assume that the debate takes place at the level of the objects of sublimity experiences, we share the idea that we should avoid radically subjective or egoistic models of the sublime. However, we think that we should also avoid accounts that focus excessively on the object side and underestimate the subject side. What we are suggesting here is precisely that the sense of self-negation or, to put it in our terminology, decreased self-focused attention derives from the fact that sublimity experiences are ontologically more self-centred than beauty experiences – they have implications for the status of the self that beauty experiences lack.

Thus, decreased self-focused attention is compatible with the ontological hypothesis that the sublime (i.e., the real object of sublimity experiences) is a relational property involving the self. The next question is of course: if this is so, then why is the self not explicitly represented in sublimity experiences? Our tentative answer is that decreased self-focused attention is the symptom of the fact that sublimity experiences are *immersive*, that they tend to blur the phenomenological boundary between the self and the world. The sublime overwhelms us, to the point that we lose ourselves in it. In our view, immersion is at least a necessary condition for an experience to be of the sublime. We can leave open here whether it is also a sufficient condition (to argue that it is, we would need to show that the relevant notion of immersion is more global than other, more superficial forms of immersion, in that it affects high-level aspects of the self). It follows that non-immersive experiences, whether aesthetic or not, cannot be sublimity experiences.⁹

5. The sublime and the arts

The claim that sublimity experiences are immersive has implications for an important issue, which we have already mentioned, namely that concerning the scope of sublimity experiences. Nature, with its huge trees, wide expanse of waters, mountains, storms, is widely recognized as the source of paradigmatic objects of sublimity experiences. We have pointed out, however, that also human creations can give rise to such experiences. As examples, we can mention the Pyramids of Giza or an impressive dam, as well as St. Peter's Basilica and piazza in Rome, the ancient Jordanian city of Petra, or the Great Wall of China. Architecture, then, seems able to evoke sublimity experiences. What about other forms of art? Here philosophical intuitions highly diverge. While some authors have claimed that visual artworks or musical excerpts can elicit sublimity experiences (for a recent positive account, see Shapshay 2014), others banish the latter from the artistic domain.

Consider a recent defence of the radical claim that our experience of the sublime is not an artistic experience, put forward by Emily Brady. Inspired by Kant, Brady argues that most works of art are unable to evoke sublimity experiences. She grounds this claim on the hypothesis that most works of art would lack at least four features needed to evoke such experiences. As she puts it:

First, most works of art simply do not possess the scale of the sublime, that is, the qualities of size and power which characterize actual sublime experiences. Their smaller size and scope means that they are limited in terms of sublime effect. This relates to the second reason: the formlessness and unbounded character of the sublime is something art has difficulty substantiating, given its various frames and forms, settings, and conventions. Third, art lacks the visceral 'wild' and 'disordered' character associated with dynamically sublime things – at least where the natural world is concerned. Fourth, artworks, on the

whole, lack the capacity to evoke feelings of physical vulnerability, heightened emotions, and the expanded imagination characteristic of the sublime response. (Brady 2013: 119/120)

Brady thinks that no matter how big they are (e.g., Michelangelo's David), representational works of art lack at least one of these features and the same holds for abstract visual art (e.g., Barnett Newman's Voice of Fire)¹⁰ and for installations (e.g., Anish Kapoor's Leviathan). Brady acknowledges that some works of art within abstract visual art or some installations can approach sublimity by not being so limited (in size, scope and power) and in being able to evoke physical vulnerability and the strong and mixed emotions that go with it (e.g., Ann Veronica Janssens' disorienting installation Yellowbluepink, at least to some of us). To put it in another way these artworks would not lack the first and the fourth features. Brady underlines that some of them can even convey a sense of formlessness (and perhaps even a sense of wildness or disorder), thus meeting the second (and the third) feature. Still, their artifactuality, the fact that they are controlled and ordered, and their being circumscribed within settings (canvases, exhibition spaces, etc.) prevent them from triggering genuine sublimity experiences. Brady also stresses that the fact that even artworks such as some installations, which are potentially good elicitors of sublimity experiences in being disorienting and challenging, in the end lack at least either the second or the third feature is easily seeing by considering how we normally enjoy them. When you venture yourself in the cocoon-like environment of Anish Kapoor's Leviathan, the force of its redness and the sensation of being in a sort of innards do not bewilder you so much, Brady would suggest, because of the many distractions around you (other people, phones, flashes, etc.). Even without such distractions, which can also occur in our experiences of nature, Kapoor's installation might not be enough for us to forget that we are in the confines of a large building (such as the Grand Palais in Paris).

Actually, Brady acknowledges some exceptions. She maintains that two forms of art can

genuinely elicit sublimity experiences, namely architecture and land art. What is crucial in these cases is not only the scale, but above all the setting. The idea seems to be that, although they are human creations, buildings (e.g., the Pyramids of Giza or Tokyo Skytree), or land artworks (e.g., Robert Smithson's Spiral Jetty or Turrell's Roden Crater) are in their original (urban or natural) environment. This would give them the force to create the sense of formlessness or boundlessness and to show the wildness or disorder Brady thinks are needed to trigger sublimity experiences.

Let us now frame our disagreement with Brady. We think that arts in general (representational or abstract; see below), and not only architecture and land art, can elicit sublimity experiences in suitable conditions of presentation. Brady is right in underlining that distracting factors may inhibit the triggering of a sublimity experience, but these seem to be merely contingent features of the context (that can even be present when we engage with architecture and land art!). Brady's discussion does not seem to point at essential features that would prevent arts to elicit sublimity experiences.

In our view, the real issue is whether the conditions of presentation of the sublime object are such that an immersive experience is possible. Immersion (a necessary condition of sublimity experiences in our view) can be difficult to achieve in the presence of distracting factors that intervene between the subject and the putative sublimity elicitor. When works of art cannot elicit suitable immersive experiences, the limitation is often epistemic rather than ontological. The works of art are not experienced under the right mode of presentation. The subject must have the right perspective on them to capture the self-relative properties that elicit sublimity experiences. Such a perspective may be cognitively demanding in many cases, but we see no impossibility in principle here.

Consider a piece of abstract work, such as Kapoor's Leviathan. In order for this work to instantiate the self-relative property that constitutes the sublime, the subject must be appropriately related to it. The relevant relation is not merely spatial, of course. The subject must

17

be in a suitable state of mind to appreciate the grandeur of the work. The fact that other persons are walking around, the conscious realization that the installation takes place in a wider museum context and other distracting factors might prevent the subject from playing her part in the instantiation of sublime properties.

The case of representational works of art adds a further level of complexity, since selfrelative properties can also be represented, for instance in a picture. Now a property can be represented without being exemplified. For instance, a property (such as a cheerful face) can be seen to be exemplified *in* a painting without being exemplified in the world (the painting has no face). The painting represents a property but does not exemplify it. Similarly, a sublime natural scene can be represented, for instance in one of Caspar Friedrich's paintings, but it does not follow that it is exemplified by the painting itself. Thus, we might not have a sublimity experience in looking at the picture however much we admire it.

However, the point is that representation and exemplification can coincide under certain, possibly rare conditions. When the subject is not distracted (she is right in front of the picture and is in the right mood, etc.), she might actually have a sublimity experience while looking at a painting, because the relevant elicitor is not only represented in the painting but *seems* to be exemplified as well (even if illusorily). In this case, the subject is immersed in the scene represented in the picture. There is no need to claim that sublimity experiences are impossible in principle with respect to pictures of the sublime, although more work must be done to fully understand the conditions under which representational works of art can elicit immersive experiences.

Music is an interesting case in point. It is mainly a non-representational art, and it is not clear whether it is always experienced as a human product, or as an artefact. In the literature, not so much attention has been paid to music as an elicitor of sublimity experiences.¹¹ Bradly briefly discusses music and seems to suggest that it does meet her first and fourth features. Indeed, music

is not limited in the way visual arts can be and is able to evoke physical vulnerability and a vast range of strong and mixed emotions. However, Brady claims that: "while we may be able to bracket much of the artefactuality of music while we listen, it will always lack the unpredictability and indeterminate character of the natural sublime." (Brady 2014: 134). We take Brady to maintain here that music still does not show her second and third features. We think that there is room for questioning such a view. Music is also not circumscribed in the way visual arts can be and can be unpredictable and indeterminate. Think when we are at the mercy of the unfolding of the music, unable to anticipate how it may develop (as in the case of compositional techniques associated with the European avant-garde, e.g., Ligeti's Requiem). Even if, among the artistic experiences, music can more easily give rise to sublimity experiences, it is not essentially different from the other arts, which are equally capable to open ourselves to the sublime if the context is epistemically favourable.

6. Conclusion: A roadmap for experimental studies of the sublime

The experience of the sublime has received little attention compared to other aesthetic experiences. This is probably due to theoretical and methodological limitations in defining stimuli that effectively trigger sublimity experiences. Indeed, since vastness is an important criterion in defining sublimity-triggering stimuli, we can easily acknowledge the difficulty in reproducing this feature in a laboratory setting. Indeed, even if researchers can present pictures of vast landscapes, these stimuli will nevertheless be presented on a computer screen, inevitably limiting their *grandeur*. We shall propose here two possible settings to get around this limitation.

The choice of pictorial material is probably due to theoretical positions exposed above. Indeed, most theories agree in thinking that natural scenes are the best elicitors of sublimity experiences, and as we have seen, some even propose that artworks cannot in any case (with rare exceptions) elicit sublimity experiences. This state of matter has probably led to neglect a possible interesting candidate for being a sublimity elicitor, namely music. Indeed, contrarily to pictorial material, music (and in general auditory stimuli) is not limited in space, and its vastness is linked to other sensory features (e.g., loudness). Moreover, music has been shown to be a strong emotional elicitor (Thompson and Quinto 2011), and is more apt to elicit complex emotional responses, beyond the pleasant-unpleasant or positive-negative dichotomies, that more likely mirror the ambiguous emotional reaction produced by sublimity experiences. Indeed, in an interesting work, Zentner and colleagues (2008) showed that the spectrum of emotional reactions to music could be better described by a domain-specific model comprising 9 factors (emotional themes) encompassing: joyful activation, sadness, tension, wonder, peacefulness, power, tenderness, nostalgia and transcendence. Moreover, they showed that these themes could be regrouped in three superordinate factors that they called sublimity, vitality and unease. Even if the higher-order factor of sublimity does not completely match the definition of the sublime sketched here and in previous philosophical approaches, it contains aspects related to wonder and transcendence, while other aspects linked to the sublimity experience, such as power, should be subsumed under the two other higher-order factors (vitality and unease). The interest of this study is twofold. On the one hand, it shows that music is frequently associated with emotional terms related to the experience of the sublime - thus, confirming our intuition that music could be a good candidate for the study of the sublime. On the other hand, it suggests that a fine-grained analysis of emotional experience, beyond the categorical (basic emotions) or the dimensional approach, could give important hints on emotional reaction toward complex experiences, such as music listening or contemplating an overwhelming sea in a storm.

Our second proposal is to present visual scenarios employing immersive virtual reality (VR). On the one hand, VR can indeed maintain relative dimension and thus vastness. On the other hand, VR is known to facilitate immersion and a subjective sense of presence. Presence is a concept developed in VR and is commonly defined as the feeling of being located and

responding to a mediated environment as if it were real (Sanchez-Vives and Slater 2005). It is supposed to be supported by both emotional and attentional engagement toward the stimulus (Witmer and Singer 1998). Absorption, a related concept that is defined as a "disposition for having episodes of 'total' attention that fully engage perceptive and imaginative resources, resulting in a heightened sense of reality towards the object of attention" (Tellegen and Atkinson 1974: 268), has been recently shown to be a strong predictor of the experience of awe (van Elk, Karinen, Specker, Stamkou and Baas 2016). Thus, we propose that music and VR could be potential elicitors of genuine sublimity experiences in a laboratory setting. Further studies employing this kind of material should elucidate the relationship between beauty and sublimity experiences on the same sample, possibly coupling subjective and neurophysiological data collection. Another open question that could be answered is the link between the experience of the sublime and the self. Finally, employing VR the intriguing hypothesis of a link between presence and the sublime could be tested.¹²

Notes

In this paper, we are interested in a kind of conscious experience which is often informally called "experience of the sublime". We use the phrase "sublimity experience" to refer to this kind of experience. We may call "sublime" whatever in the world the sublimity experience concerns or is about. (For this reason, we avoid using the phrase "sublime experience", which suggests that the sublimity experience is itself sublime.) Sometimes what we informally call the "object" of a sublimity experience is really a "sublimity elicitor", i.e., merely the cause of the experience, which may or may not be sublime. Perhaps a Romantic painting of a grandiose scenery can elicit a sublimity experience without itself being sublime. We leave open the difficult question of what the conditions

of satisfaction or appropriateness of sublimity experiences are.

- 2 The attention to the sublime within rhetoric acquired full strength among Ist century BC rhetoricians, as shown by the treatise *On the Sublime* by (Pseudo-)Longinus. In the XVIIth century several translations of this treatise aroused interest in the sublime as a general aesthetic category, rather than as a rhetorical style. It should be noted that historically the concept of the sublime has been also tied to moral values. Benedetto Croce (1902) even claimed that the sublime is a wrongful intrusion of ethics in the domain of aesthetics.
- 3 Tom Cochrane stresses that this negative aspect of the sublime "is not quite fear, but something that often manifests itself as fear" and calls it "a feeling of self-negation" (Cochrane 2012, p. 125-126). It is interesting to notice that the idea that sublimity experiences do not involve genuine fear seems to be suggested by experimental data. In their study on the sublime, Tomohiro Ishizu and Semir Zeki (2014) have not found an activation of the main areas associated with experiences of fear, namely the amygdala or the insula. Still, they have found a prominent involvement of the cerebellum, especially of Crus II, which previous studies have found to be activated with fear. However, as we point out later (§3), it is hard to stimulate an ecologically valid experience of the sublime in a laboratory setting.
- 4 According to Sandra Shapshay (2013, 2014), this aspect of the sublime is downplayed by Edmund Burke (1759). She claims that his account of the sublimity experience "sees it as a largely non-cognitive, affective arousal", which she calls the "thin sublime" (Shapshay 2013, p. 181). By contrast, she points out that this "exaltation" or "elevation" aspect of sublimity experiences has been "exuberantly" articulated by John Baillie (1744) and is clearly important for both Kant and Schopenhauer. She maintains that the latter understand the sublimity experience "as including, in addition to this affective arousal, an intellectual play with ideas involving especially ideas regarding the place of human

beings within the environment" (ibid.). She calls this account the "thick sublime". Emily Brady has contended that another interpretation of "the more reflective aspects" of sublimity experiences can be offered. She contrasts Shapshay's interpretation in terms of "cognitive or intellective components" with an interpretation "in terms of aesthetic feeling or aesthetic apprehension" (Brady 2013, p. 189). It is beyond the scope of the present discussion to examine in depth this debate, but simply note that there might be no genuine contradiction in talking about cognitive aesthetic feelings or aesthetic apprehensions, namely feelings that in some way depend on, or are penetrated by, highlevel cognitive states.

- 5 As Burke (1759) noted, this is not to say that sublimity experiences cannot be elicited by something small but terrible or vertiginous, such as the infinitely small.
- 6 This is not to say that beauty experiences do not involve reverence or submission like sublimity experiences. Within naturalized aesthetics, Jessie Prinz (2011) stresses the importance of elevation and/or feeling of reverence in aesthetic experiences.
- 7 It is interesting to notice that the activation of these areas seems to reinforce the idea that sublimity experiences have a double (positive and negative) nature (see §2). Indeed, as Ishizu and Zeki stress: the head of caudate is taken to correlate with experiences of pleasure, the putamen with experiences of hate and the posterior hippocampus with experiences of memory, romantic experiences, as well as with anxiety related to interpreting the environment as posing a threat.
- 8 Interestingly, a recent study has reported that only low-arousing, but not high-arousing aesthetic emotions (in response to music) were accompanied by activity in medial prefrontal cortex (Trost, Ethofer, Zentner and Villeumier 2012). Thus, an alternative explanation for the absence of activity in self-referential areas could be that sublimity experiences would be more arousing compared to beauty experiences.

- 9 Interestingly, Cochrane also suggests that in sublimity experiences our attention may be captured "to such an intense degree that one becomes unreflectively absorbed in the experience" (Cochrane 2012, p. 129). Another respect in which his theory implicates a blurring of boundaries is that he characterizes the sublime as a kind of empathic experience (feeling connected to the thing); see his reference to Romain Rolland's "oceanic feeling". Note that if our analogy is right, colour experiences also are immersive, but of course much more locally than sublimity experiences. The latter experiences seem to affect the whole phenomenological boundary between the self and the world. An interesting question, raised by a referee, is whether our formulation entails that sublimity experiences do not come in degrees (it seems that in our global sense of "immersion", one cannot be more or less immersed). We leave this question to another occasion.
- 10 Barnett Newman himself was interested in the sublime and wanted to convey sublimity experiences via his art (Newman 1948; see also the article by Arthur Danto on Newman and the sublime Danto 2002).
- 11 For instance, there are only some hints in Addison's writings about the beautiful and the sublime in music. Burke discusses music only in relation to the beautiful; when concerned with the sublime he talks about sudden, unexpected and loud sounds. "The aural equivalent of vastness", as suggested by Todd Gilman (2009: 535). Arguably drawing from Schopenhauer's view about music (see Boogaard 2007), Richard Wagner maintains that the sublime is the only proper aesthetic category that we must use to judge music (Wagner 1896: 77-78).
- 12 We thank Tom Cochrane and an anonymous referee for extremely helpful comments on an earlier draft of this chapter. Margherita Arcangeli's funding has been provided by the Alexander von Humboldt Foundation.

References

Addison, J. (1712), 'Paper II. On the Pleasure of the Imagination', in J. Addison and R. Steele(Eds), *The Spectator*, 412 Monday, June 23. London: George Routledge and Sons.

Baillie, J. (1747), An Essay on the Sublime. London.

- Bohrn, I. C., U. Altmann, O. Lubrich, W. Menninghaus and A. M. Jacobs (2013), 'When we like what we know–A parametric fMRI analysis of beauty and familiarity', *Brain and language*, 124 (1): 1-8.
- Boogaard, M. (2007), 'The Reinvention of Genius. Wagner's Transformation of Schopenhauer's Aesthetics in "Beethoven", *Postgraduate Journal of Aesthetics*, 4 (2): 1-10.
- Brady, E. (2013), *The Sublime in Modern Philosophy. Aesthetics, Ethics, and Nature.* Cambridge: Cambridge University Press.
- Brown, S., X. Gao, L. Tisdelle, S. B. Eickhoff and M. Liotti, M. (2011), 'Naturalizing aesthetics: brain areas for aesthetic appraisal across sensory modalities', *Neuroimage*, 58(1), 250-258.
- Burke, E. (1759), A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and the Beautiful. Second Edition edited by J. T. Boulton. Notre Dame (Illinois): University of Notre Dame Press, 1968.
- Cochrane, T. (2012), 'The emotional experience of the sublime', *Canadian Journal of Philosophy*, 42(2): 125-148.
- Cohen, J. (2010), 'Color Relationalism and Color Phenomenology', in B. Nanay (Ed), *Perceiving the World*. Oxford: Oxford University Press, 13-32.
- Croce, B. (1902), *Aesthetic: As science of expression and general linguistic*, translated by D. Ainslie. New York: Noonday.

Danto, A. C. (2002), 'Barnett Newman and the Heroic Sublime', The Nation, 17: 25-29.

- Dokic, J. (2016), 'Aesthetic Experience as a Metacognitive Feeling? A Dual-Aspect View', *Proceedings of the Aristotelian Society*, 116 (1): 69-88.
- Gilman, T. (2009), 'Arne, Handel, the Beautiful, and the Sublime', *Eighteenth-Century Studies*, 42 (4): 529-555.
- Keltner, D and J. Haidt (2003), 'Approaching awe, a moral, spiritual, and aesthetic emotion', *Cognition and Emotion*, 17 (2): 297-314.
- Ishizu, T. and S. Zeki (2011), 'Toward a brain-based theory of beauty', PLoS One, 6 (7): e21852.
- Ishizu, T. and S. Zeki (2014), 'A neurobiological enquiry into the origins of our experience of the sublime and beautiful', *Frontiers in human neuroscience*, 8: 891.
- Levinson, J. (2011), 'Beauty is Not One: The Irreducible Variety of Visual Beauty', in E. Schellekens and P. Goldie (Eds), *The Aesthetic Mind: Philosophy and Psychology*, pp. 190-207. Oxford: Oxford University Press.
- Kant, I. (1790/2000), *Critique of the Power of Judgment*, edited by P. Guyer, translated by P.Guyer and E. Matthews. Cambridge: Cambridge University Press.
- Kawabata, H. and S. Zeki (2004), 'Neural correlates of beauty', *Journal of neurophysiology*, 91 (4): 1699-1705.
- (Pseudo-)Longinus (1995), *On the Sublime*, translated by W. H. Fyfe, revised by D. Russell. Cambridge (Mass.): Harvard University Press.
- Martinelli, P., M. Sperduti and P. Piolino (2013), 'Neural substrates of the self-memory system: New insights from a meta-analysis', *Human brain mapping*, 34 (7): 1515-1529.
- Newman, B. (1948), 'The sublime is now', *Tiger's Eye*, 1 (6): 51-3.
- Piff, P. K., P. Dietze, M. Feinberg, D. M. Stancato and D. Keltner (2015), 'Awe, the small self, and prosocial behavior', *Journal of personality and social psychology*, 108 (6): 883-899.

Sanchez-Vives, M. V. and M. Slater (2005), 'From presence to consciousness through virtual

reality', Nature Reviews Neuroscience, 6 (4): 332-339.

- Shapshay, S. (2013), 'Contemporary Environmental Aesthetics and the Neglect of the Sublime', *British Journal of Aesthetics*, 53 (2): 181-198.
- Shapshay, S. (2014), 'The Problem and Promise of the Sublime: Lessons from Kant and Schopenhauer', in J. Levinson (Ed), Suffering Art Gladly. The Paradox of Negative Emotion in Art, pp. 84-107. UK: Palgrave Macmillan.
- Schopenhauer, A. (1819/1844), Die Welt als Wille und Ausstellung, translated as The World as Will and Representation, Vol. I. by E. F. J. Payne (1969). New York, NY: Dover Publications.
- Scruton, R. (2009), Beauty. Oxford: Oxford University Press.
- Shiota, M. N., D. Keltner and A. Mossman (2007), 'The nature of awe: Elicitors, appraisals, and effects on self-concept', *Cognition and emotion*, 21 (5): 944-963.
- Stalnaker, T. A., N. K. Cooch, and G. Schoenbaum (2015), 'What the orbitofrontal cortex does not do', *Nature Neuroscience*, 18 (5): 620-627.
- Tellegen, A. and G. Atkinson (1974), 'Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility', *Journal of abnormal psychology*, 83 (3): 268-277.
- Thompson, W. F. and L. Quinto (2011), 'Music and emotion: Psychological considerations', in
 E. Schellekens and P. Goldie (Eds), *The Aesthetic Mind: Philosophy and Psychology*, pp. 357-375. Oxford: Oxford University Press.
- Trost, W., T. Ethofer, M. Zentner and P. Vuilleumier (2012), 'Mapping aesthetic musical emotions in the brain', *Cerebral Cortex*, 22: 2769-2783.
- van Elk, M., A. Karinen, E. Specker, E. Stamkou and M. Baas (2016), "Standing in Awe": The Effects of Awe on Body Perception and the Relation with Absorption', *Collabra*, 2(1): 4.

Vessel, E. A., G. G. Starr and N. Rubin (2012), 'The brain on art: intense aesthetic experience

activates the default mode network', Frontiers in Human Neuroscience, 6: 66.

- Wagner, R. (1896), 'Beethoven', in *Richard Wagner's Prose Works*, Vol. 5, pp. 61-126, translated by W. A. Ellis. London: Victor Gollancz Ltd.
- Witmer, B. G. and M. J. Singer (1998), 'Measuring presence in virtual environments: A presence questionnaire', *Presence: Teleoperators and virtual environments*, 7 (3): 225-240.
- Zeki, S., J. P. Romaya, D. M. Benincasa and M. F. Atiyah (2014), 'The experience of mathematical beauty and its neural correlates', *Frontiers in human neuroscience*, 8: 68.
- Zentner M, D. Grandjean and K. R. Scherer (2008), 'Emotions evoked by the sound of music: characterization, classification, and measurement', *Emotion*, 8: 494-521.