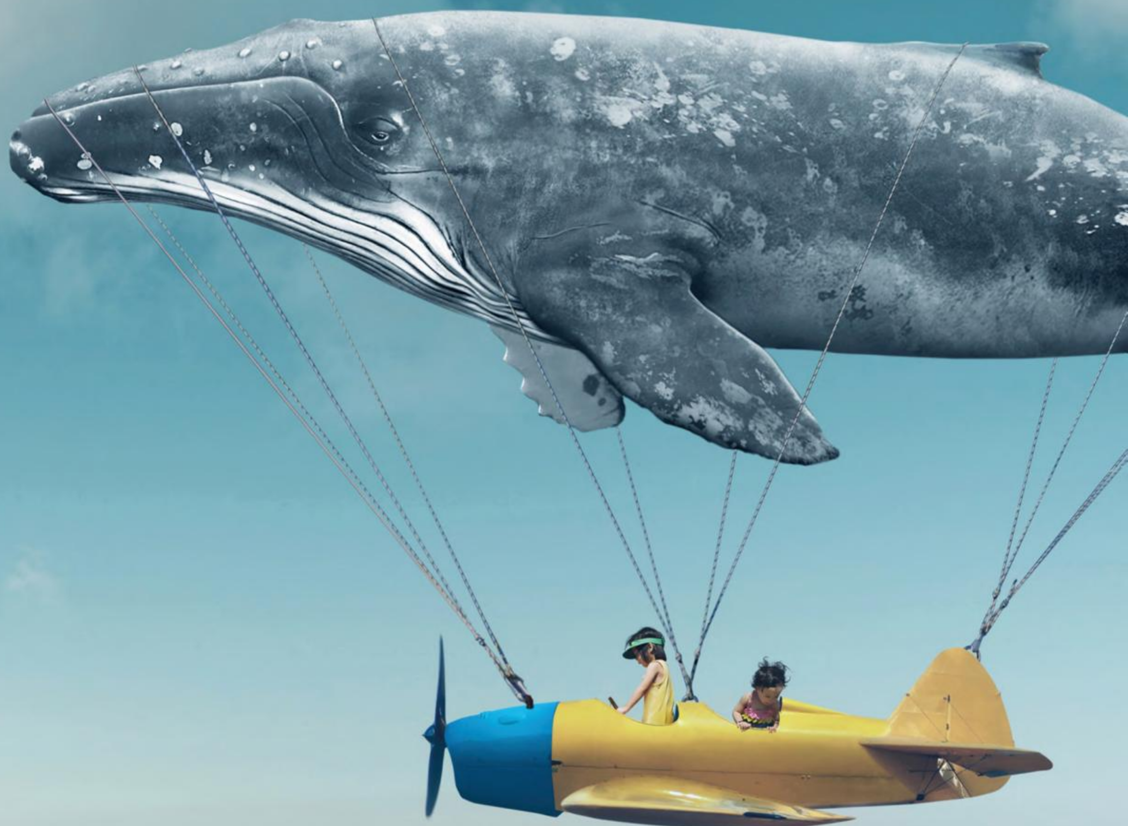
Vlad P. Glăveanu



WONDER

The Extraordinary Power of an Ordinary Experience

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Introduction: The Power of Everyday Experience

Wonder is truly an ordinary experience. We wonder what to do when confronted with a new situation or with a difficult problem. We wonder what other people might think when communication breaks down or when we come across the unexpected. We wonder about the world and about our place within it whenever we are faced with stunning views of the night sky or with magnificent landscapes on Earth. Finally, we also wonder about wonder itself, and this is what makes books like this one possible. And it is through such books that we get to raise new questions: How exactly do we wonder? Is wondering experienced the same way by everyone? In fact, are we really wondering in all the instances mentioned above, or doing something else (as well)? What is distinct about wonder beyond mere curiosity, awe or contemplation? And, if we do wonder on a daily basis, what purpose does this serve? Do we wonder in order to understand things better, to get out of trouble or to explore the unknown? Or is there much more to it?

In this book, I will argue that, indeed, there is much more to wonder than its use in everyday language suggests, where the word became so diluted that it often just stands for 'thinking about' something. Wonder is an ordinary experience, but this doesn't mean we get to *fully* wonder[i] very often, for a variety of reasons. And yet, when we do, wondering can have extraordinary consequences for our lives.

Wonder is, in many ways, a distinctively human phenomenon. While nonhuman animals could experience emotions like surprise and behave in ways that clearly signal curiosity, it is arguable whether they are able to take

[i] The meaning of 'fully' will become apparent in Chapter 3, when I discuss how we wonder. I want to note from now, though, that I am not implying a hierarchy going from 'imperfect' to 'perfect' forms of wondering. Rather, I am referring here to moments of wondering that reflect all its characteristics, to be described later on.

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enough distance from their goals and projects[1] to effectively wonder about things. Indeed, newborns probably cannot wonder either, in the narrow sense of the term. In order to wonder, as I will explain at length in this book, one needs the immersion into experience (that animals and newborns excel at) to be matched by reflective distance (which depends on being able to develop and use meanings, including an understanding of one's own self). This unique mixture of immersion and detachment characterizes wonder and, at the same time, sets it apart from awe, curiosity and surprise. To wonder means to be unsettled by something, at an emotional level, *and* to be able to explore that something, physically and/or imaginatively, and create meaning out of it.

Wondering begins in early childhood, when the child becomes capable of grasping not only the world around but also his or her place within it. Indeed, as I will explain in the following chapters, wonder equally points to the wondrous and to the wonderer. This is why a clear sense of self and one's own involvement in the world are necessary preconditions for wondering. It is also why wonder has a special part to play in the development of the person throughout the life course. While we imagine that children wonder about many more things than adults (and they often do), this doesn't mean that wondering is only valuable during childhood. On the contrary, being able to wonder relates to mental health, well-being and creativity across the lifespan.

This makes it all the more surprising to learn that wonder is largely absent from contemporary philosophical[ii] and scientific debates,[iii] a lack that is due to a variety of reasons.

On the one hand, wonder is an intrinsically complex phenomenon to study (and wonder about). This is because, as a type of experience, it resists easy categorization and measurement. Wonder, as stated before, goes well beyond the wonderer – it constitutes a bridge to the world, one that transforms person and world through their relationship. Understandably, positivist science and its oftentimes narrow assessments of personal attributes and behavioural indicators cannot encompass such complexity in a holistic and dynamic manner.

[ii] 'Philosophers once delighted in wonder, to the point where they claimed it as their own – as a special state of mind which defined their distinctive intellectual activity. Today's philosophers, in contrast, show few signs of thinking about wonder at all. Wonder is curiously absent from contemporary philosophical concerns. It has, it seems, been relegated to the past' (Lloyd, 2018, p. 1).

[iii] There is 'something simpler to remark, yet no less surprising for that, and that is the widespread neglect of wonder in contemporary research on the emotions. It is a neglect that appears to unite psychologists and philosophers of the emotions otherwise divided by important methodological and philosophical differences' (Vasalou, 2012, p. 17).

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On the other hand, wonder might be, for some, not really worth studying at all. Indeed, the history of reflection on this phenomenon is marked by periods of waxing and waning, from fascination in antiquity and the Middle Ages to scrutiny and even rejection during early modernity.[2] The reason for the former has to do with the association between wonder and knowledge (or, at least, getting to know), while the explanation for the latter is grounded in the reverse: an assumed connection between wonder and not knowing. And, given the fact that not knowing can either be paralysing or invite in superstition and excess, critics of wonder have, through the centuries, argued that we are much better off reasoning than wondering. Wonder can be foolish, childish, even dangerous, so why indulge in it?

Luckily for our aims here, this line of critique has been systematically challenged in recent decades. In many ways, we are witnessing today a true renaissance of this topic, with numerous books coming out on the history of the concept,[3] its relation to fiction and literature,[4] its role in education[5] and its study within a cross-disciplinary framework.[6]

Today's writing shows support for wonder as a practice and optimism regarding its role. Wonder is claimed to stimulate intellectual, moral, aesthetic growth and, on the whole, to make life better and more worth living.[7] Of course, though, such pendulation between being considered useless and dangerous and being seen as vital and enormously helpful left its mark on our contemporary understanding of wonder. In particular, it left us rather *confused* as to what wonder actually is and *ambivalent* as to what it is for.

Does wonder help us have a deeper engagement with reality or give us opportunities to escape from it? Does it make us more critical or more gullible? Does it lead to some kind of knowledge or keep us in a perpetual state of not knowing? And what about the oftentimes uncomfortable feeling we are left with when wondering without ever getting to know? If wonder is not meant to solve problems but, on the contrary, to keep them open, then it risks being, within the Western scientific and philosophical tradition, 'progressively relegated to something like a temporary irritant: a discomfort not to be endured, but rather to be cured – or at least tranquilized'.[8] Arendt warned, in this context, about the wonderer becoming disconnected from his or her social and political reality and, gradually, uncapable of forming opinions or making decisions.[9] Not an enviable state by any means.

So, is wonder finally good or bad? Of course, it is neither, or rather, it is both at the same time (like most things, actually). Wondering can lead to emotional discomfort and mental paralysis, but it doesn't have to. It can stimulate a healthy

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development and open us to others and to spirituality, but it doesn't always achieve this. Between deep suspicion and uncritical optimism, there is a middle path we need to travel when discussing the act of wondering.

In this book, I start from the premise that wonder is part and parcel of our everyday experience. I also claim that wondering can have tremendous consequences for the self, for others and for society, some of them sudden and visible, others accumulating gradually, over time. These consequences are welcomed inasmuch as they help us develop new perspectives on ourselves and on the world. What uses we end up putting these perspectives to will depend on personal inclination and circumstances. But this makes it all the more important to unpack the processes of wondering and learn from them. When we do, as we are trying here, we will notice a series of *contradictions*. Being able to understand and enjoy rather than integrate or 'solve' them is the first step towards unlocking wonder's potential to transform our existence.

Why do I personally wonder about wonder? As a social psychologist who has been studying creativity for more than a decade, I often came across studies that mention wonder but never get to examine it.[10] I also noticed that many of the people I talked to about creativity – designers, artists, craftsmen and scientists, no matter their level of expertise, children and adults alike – describe their process in terms of wonder or what I call, for now, associated phenomena: awe, contemplating, pondering, marvelling, experimentation and curiosity. And yet, wonder has rarely been theorized in psychology, and almost never in the psychology of creativity.[11] And this, in my view, represents a significant gap in our knowledge of what it means to create and, ultimately, to exist as a human being. In this regard, what I repeatedly found was that creative people can not only tolerate ambiguity and contradictions well, they actually thrive on them. And this, as noted above, is precisely what wondering can offer us all.[iv]

Above all, what makes me study wonder is the insight that what this experience of not knowing and wanting to know does, above everything else, is open us to a world of *possibility*. Wonder, in the way I discuss it in this book, holds the key to our engagement with the possible in our existence, from mundane insights to revolutionary transformations. How does wondering help us engage with the possible? By making us aware of the fact that our experience of the world is one among many, and that the perspectives we develop in this world are exactly

[iv] Just like Rubenstein (2008, p. 23) aimed before me, in this study I will also be 'asking what it might mean *to stay with* the perilous wonder that resists final resolution, simple identity, and sure teleology'.

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that – perspectives – not ultimate and singular truths. But I anticipate perhaps too much here.

For the purpose of this introduction, I want to guide you, the reader, through the logic behind this volume. I conceived it as a journey that takes us from historical reflections on wonder to personal experiences of it, from general statements to specific processes, and from a focus on the self to a focus on society and on education. Along the way, I propose two 'models' of wondering: a structural one, which connects it to similar phenomena while specifying its unique characteristics, and a dynamic one, based on a set of interdependent and cyclical phases. These theoretical proposals come from empirical observations about wondering, both my own and of others, and open up (hopefully) new horizons for research and application. Indeed, while this is not a practitioner's guide, I want this book to be not only available to a general public but also useful in a pragmatic sense. In order to facilitate this process, I included several short stories, in between chapters, that in my view capture something essential about how, when and why we wonder. To ease reading, I include comments as footnotes and references as endnotes. A short glossary with definitions of key terms in the volume is also offered. In the end, by outlining a view of what wonder is and how it 'works', my aim is to offer readers the practical means to both think about and cultivate wonder in their own life and the lives of others. If these two aims are contemplated by you, I will declare myself satisfied.

With these ambitious goals in mind, let's begin.

Notes

1 See Nussbaum (2001).
2 For details, see Daston & Park (1998).
3 See Evans and Marr's (2016) edited book *Curiosity and wonder from the Renaissance to the Enlightenment* and Lloyd's (2018) *Reclaiming wonder after the sublime*.
4 See Kareem's (2014) *Eighteenth-century fiction and the reinvention of wonder* and Economides' (2016) *The ecology of wonder in romantic and postmodern literature*.
5 See Egan, Cant and Judson's (2014) edited book *Wonder-full education: The centrality of wonder in teaching and learning across the curriculum*.
6 See Vasalou's (2012) edited book *Practices of wonder: Cross-disciplinary perspectives* and Gallagher, Reinerman-Jones, Janz, Bockelman and Trempler's (2015) *A neurophenomenology of awe and wonder*.
7 See Fuller (2009), pp. 1–2.

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8 See Rubenstein (2008), p. 12.

9 See Rubenstein (2008), p. 21.

10 One example, Rothenberg's (2015) *Flight from wonder: An investigation of scientific creativity*.

11 For first attempts in this direction, see Glăveanu (2019c, & 2017a).

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Here be Dragons

It is hard to imagine what it meant for early civilizations to know only parts of the world and wonder about what was not – and maybe could never be – known from it. Of course, even today there are corners of our planet that remain unexplored, but we tend to have a rather clear picture of the Earth's geography and its inhabitants. Perhaps the closest we get to approximating this feeling is by considering outer space and its mysteries. Then and now, we have a lot to understand and marvel about when it comes to our universe. Also then and now, humans did not satisfy themselves with not knowing – they had to guess or approximate. And what better way to do this than by building on current experience and all the miraculous things that are already part of it? And yet, the unknown is not only there to become known. Sometimes we might want to avoid it, play it safe and keep the aura of mystery surrounding our existence on this planet.

These impulses arguably made Roman and medieval cartographers place the inscription HIC SVNT LEONES (here are lions) over unknown and potentially dangerous territories. It wasn't until the early sixteenth century that we find a variation of this expression on artefacts such as the Hunt–Lenox Globe (see Figure 1) – HIC SUNT DRACONES (here are dragons), written around the eastern coast of Asia. This remark, for as rare as it is, makes perfect sense in the context of the medieval practices of embellishing maps with mythological creatures, dragons and sea monsters as a warning to potential travellers. 'Here are dragons' or the more popular version today, 'here be dragons', might be interpreted as invitations to wonder about but not to wander off, to respect the unknown and yet make it somehow familiar. In many ways, dragons filled up a void in knowledge that both satisfied and opened our appetite for wonder.

The practice of placing dragons on or at the corner of maps precedes the expression itself. The Borgia map from c. 1430, now in the Vatican library, writes

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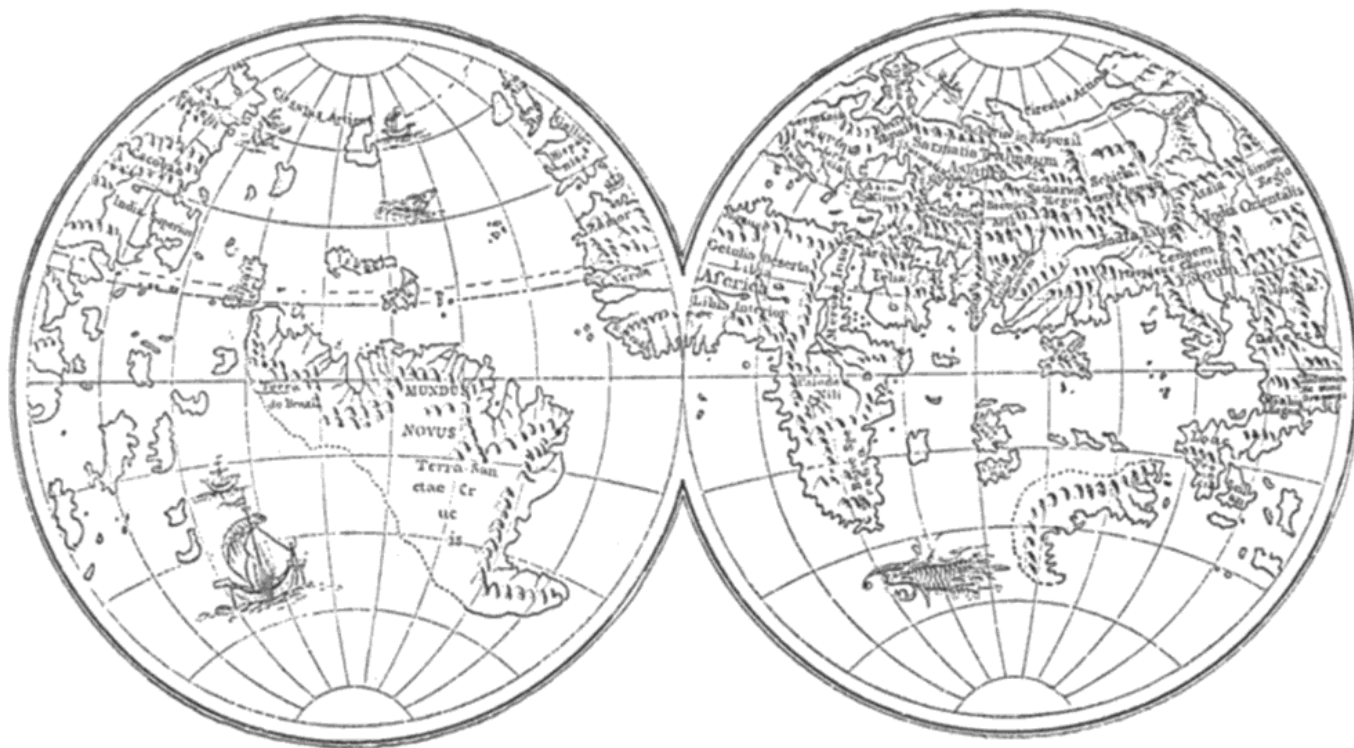

Figure 1 The Hunt–Lenox Globe (*c.*1503–7), Now Housed in the New York Public Library.
Note: As illustrated in the Encyclopaedia Britannica, 9th edn, Volume X, 1874, Fig. 2. The figure reproduced here has been authored by Kattigara (file licensed under the Creative Commons Attribution-Share Alike 3.0 Unported license).

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on a dragon-looking figure in Asia the following, in Latin: 'Here there are even men who have large four-foot horns, and there are even serpents so large that they could eat an ox whole.' Why Asia again? It can be assumed that some of these remarks refer to the big Komodo lizards living on some Indonesian islands. While a reputable foe, the Komodo dragon offers but one 'incarnation' of a vision that both terrified and fascinated Europe for centuries: that of terrible monsters and grave dangers hiding away in caves, at the bottom of the sea or lurking within lands unknown. Monsters didn't have to be products of wild fantasy, however. They could easily have been living or imagined beasts considered repulsive or treacherous. This is how, for instance, *Tabula Peutingeriana*, a medieval copy of a Roman map, has written on it in Latin 'in these places elephants are born', 'in these places scorpions are born' and 'here Cynocephali are born' (which, in case you are wondering, designates a human with a dog's head, doubtlessly not very pleasant to meet).

It is interesting, in this context, to reflect a bit on the related notion of *Terrae Incognitae*, or the lands that remain unknown, and to note the overwhelming pull these kinds of lands have on our imagination. The unknown is not only a space of mystery and, at times, terror (going back to the presumed dragons) but also one of fascination and fantasy. Indeed, to mark a place as *Terrae Incognitae* means to signal it out for future exploration, physical or imaginative. Even today, when arguably there are few, if any, places on Earth that can claim this status objectively, there will always remain a land unknown in personal terms, not only metaphorical but also literal. *Terrae Incognitae* starts right after the line of the horizon and, for as much as we can anticipate (and many times correctly so) what is 'out there', and for as much as we are helped by technology today to communicate with people from beyond our physical horizon, the question of how we could ourselves directly experience what we don't know remains as potent as ever.

It is the song of the Sirens, other mythological creatures that, unlike their fictionalized counterparts in Disney productions,[i] represented the allure of dangers at sea. Their singing could drive sailors mad and make them wreck their ship into hard rocks. At the same time, being enchanted by such songs and resisting them (as was the case of Ulysses) is what makes any journey worth taking. Without the unknown, there is no motivation to start wondering in the

[i] Interestingly, the Sirens of Greek mythology were not the half-person, half-fish mermaids of today but creatures that combined women's and birds' parts in various ways.

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first place. Without the dangers, there is no excitement to go on and to wonder some more.

John K. Wright[1] wrote compellingly, in this regard, about the role of imagination in geography. He saw imaginative explorations of the unknown, embodied in *Terrae Incognitae*, as an essential part of being a geographer and, more generally, a curious explorer of the world. What is unknown will always be contextual and depend on historical time, community of belonging and personal circumstances. But the process of turning the '*incognitae*' into '*cognitae*' should be matched by its reverse. Rediscovering the wonders of a land considered known, with the help of the imagination, is equally important as discovering the unknown in the first place. They both involve an aesthetic engagement with one's world that goes above and beyond the cognitive understanding of it.[ii] It is a way to keep the Sirens' songs (or dragons' breath of fire) as part of the story, as a way of being inspired, instead of doing away with them within a fully classified and completely known universe.

Returning to the phrase 'Here be dragons', it is widely used today but less in reference to voyages, maps or globes. Instead, it is referred to in fantasy novels or the exploration of extraterrestrial life.[2] Interestingly, the expression entered urban dictionaries as well, where it became the comment often left by hackers in their codes in order to indicate that a following section of it somehow works even though they don't know why, so it shouldn't be touched.[3]

From medieval times to hackers' codes, the message is clear: we don't know what is here, so stay away. And yet, this not knowing is given a concrete, even if magical, face, in the figure of the dragon. Whether someone might want to avoid the journey due to this dangerous presence or venture out precisely because of it is a question that reminds us of the biblical story of Adam and Eve. The knowledge of good and evil was a temptation occasioned by another reptilian creature, with hazardous consequences. It marked the irreversible move from a paradisiac state of not knowing (blissful ignorance) to one of knowing (and being punished for it). It is debatable whether wonder played a role in gaining this knowledge or only started after it was bestowed upon Eve, and then Adam,

[ii] Wright (1947) talks in his paper about three types of imaginative processes that are important for geography: promotional imagining, intuitive imagining and aesthetic imagining. The first one 'is controlled by a desire to promote or defend any personal interest or cause other than that of seeking the objective truth for its own sake' (p. 5). It is thus animated by human passions (including greed, fear of love) and often fuelled by prejudice or stereotypes. The second one intends 'to secure realistic conceptions' (p. 6). The aesthetic type of imagining is marked by 'a desire to enjoy the process of imagining itself, and to give satisfaction to others by communicating the results in written or graphic form'. It is an engine of wondering and being curious about the world and remaining so even after all the 'unknowns' have been turned into 'knowns'.

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through biting the forbidden fruit. Metaphorically, wondering about what lies beyond the realm of the known brings us face to face with (our) dragons. But such an encounter – if survived – can only intensify wondering. Between good and evil, safety and danger, not knowing and knowing, how did we ever come to terms with this experience?

Notes

1 See J. K. Wright (1947).

2 See Koerner & LeVay's (2001) *Here be dragons: The scientific quest for extraterrestrial life*.

3 https://www.urbandictionary.com/define.php?term=here%20be%20dragons. Accessed 23 January 2020.

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Wondering about Wonder

Wondering is a state that places us squarely between rainbows and dragons or, rather, Harpies. This is, at least, what ancient Greeks assumed when they imagined the sea god Thaumas. The son of Gaia (earth) and Pontus (sea), Thaumas is not the kind of god many remember, yet he is crucial for giving us a glimpse into what wondering was about for ancient people. And this is because the Greek word for wonder, *thaumazein*, points us to this particular deity which embodied the wonders and dangers of the sea.[1] While Thaumas himself might be little known, his descedents (from his marriage with Electra, one of the Oceanids) are not. Their union produced Iris, the rainbow, an ancient metaphor for how 'wonderful' *thaumazein* can be as an experience. Rainbows are colourful, bright, transcendent, and they represent as much as they invite wonder.[i] But Iris was not Thaumas's only child. Wonder's other daughters were the legendary Harpies, half-women, half-birds, symbols of perilous storms. Interestingly, both Iris and the Harpies were messengers, but while the former carried messages from the gods, the latter carried humans off to the underworld. Light and darkness, heaven and hell, the storm and its aftermath – these are the contrasts that make up wonder.

Thaumazein, with its emphasis on surprise (Harpies) and transcendence (Iris), is not the only ancient root for our modern notion of wonder. Besides this Greek filiation of the term, there is a Latin one, taking us to *mirari* and *miraculum* and, through them, the modern concepts of miracle and admiration. Incomprehensibility and prostration also come to mind. And then there is the English word 'wonder', the one I am (excessively) using throughout this book. Its origin is presumably cognate with the German *Wunde* or wound.[2] The experience of wonder is not only miraculous and transcendent; it can also be violent, leaving us effectively wonderstruck.

[i] As it is in the biblical tradition, then, the 'Greek' rainbow is what Onians has called 'the supreme wonder, a miracle linking heaven and earth' (Rubenstein, 2008, p. 11).

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These diverse, at times contradictory, meanings are all reflected in today's dictionary definition of wonder. As a noun, wonder is used to designate 'a feeling of amazement and admiration, caused by something beautiful, remarkable, or unfamiliar'.[3] We have here brought together within a single formulation the ancient Greeks' amazement, the Romans' admiration and its causes: beautiful Iris and the strange and unfamiliar Harpies – altogether, a remarkable experience that delivers a fatal wound to our feeling of personal comfort and secure knowledge.

For millennia, thinkers have grappled with the complexity of wonder as a phenomenon and the difficulty of pinning it down to one meaning and one valence, be it positive or negative. Wonder was, is and will continue to be associated with polar attributes: bliss, transcendence, surprise, ambiguity, the unknown and even terror. In defining wondering, it seems, one needs to make one's own conceptual commitments, delve into the rich history of the concept and select those strands that make sense with respect to one's worldview and to the general *zeitgeist*. What comes out of this exercise is a plethora of definitions, more or less elaborate and more or less scientific, philosophical or poetic. Wonder has been referred to, in the past, as 'a sudden experience of an extraordinary object that produces delight',[4] 'man's attitude in the face of the mystery of things',[5] 'the effect of novelty upon ignorance'[6] or, beautifully put, 'the spark of excitation leaping across the gap between man and the world'.[7]

My own working definition of wonder resonates with the emphasis above on suddenness, novelty and excitement. But it also connects to a theme that, in my view, is not emphasized enough in discussions about wondering, that of the *possible*. A few years ago, I defined wonder as: 'a particular type of experience whereby the person becomes (more or less suddenly) aware of an expanded field of possibility for thought and/or action and engages (more or less actively) in exploring this field'.[8] I continue to adopt this formulation and propose it here as a way of stressing, from the start, what for me are two indispensable facets of wonder: *awareness* of the possible (often association with *excitement* about it) and its *exploration*.[ii] Missing the former turns wonder into cold curiosity. Without the latter, it becomes nothing more than surprise and awe. Together, these two processes underline the transformative power of wonder: facing the rainbows and harpies of our existence with a view towards grasping their

[ii] For a similar dual emphasis, see Carlsen and Sandelands (2014, p. 375): 'Let us start by defining wonder as *a combination of (1) feeling startled or struck by something unusual in the usual* and (2) *being moved into incipient, self-transcending search that addresses Mysteries of being*'.

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meaning (for as much as this meaning will end up 'wounding' us and our sense of security, certainty and equilibrium).

Historically, wonder attracted considerable attention even if not always praise. It is important to start with the history of wondering about wonder for two reasons. First, because it offers us the background against which I will position a structural and a dynamic model of wondering and argue for their relevance. Second, because this exercise is conducive for the phenomenon we are talking about. Why did the first philosophers consider wonder as the starting point of their craft? And why, then, was it contested by seventeenth-century thinkers? How come we are witnessing nowadays a rebirth of these centuries-long debates? The historical account that follows is necessarily selective[9] but hopefully sufficient for what is to come.

1.1 In the beginning

From the very start, the story of wonder has been intertwined with that of the *possibility of knowledge*. Wonder is prompted by not knowing, but does it help us gain knowledge or, rather, keep us in a perpetual state of not knowing? And, if knowledge is acquired as part of wondering, does this knowledge come to replace wonder or fuel it further by revealing new areas of not knowing? Bottom line, does wonder lead us to knowledge or away from it?

These questions were of great concern for ancient Greeks[iii] and have been discussed by some of their best-known philosophers: Socrates, Plato and Aristotle. Each one of them reached different conclusions about the relationship between wonder and knowledge. Nonetheless, all three valued wondering and considered it the birthplace of philosophy. This idea is most famously advanced in Plato's *Theaetetus*[10] (see Box 1.1), the dialogue that focuses on Socrates' philosophical initiation of the boy Theaetetus. The topic of this dialogue is, unsurprisingly, the nature of knowledge. Through this exchange, as reported by Plato, Socrates advances his unique understanding of wonder as an emotionally

[iii] It is important to note, at this point, that wonder has been a topic of concern not only for Western thinkers; it represents a theme of reflection across civilizations, many of them more ancient than the Greeks. For example, as early as the third century BCE, the *Natyashastra*, a canonical Indian text written in Sanskrit and dedicated to the nature of consciousness, listed wonder as one of the nine main human emotions. Unlike its Western associations with curiosity and surprise, however, 'wonder in the Indic tradition is a reaction to the opportunity to witness divine, heavenly, or exalted phenomena. Wonder, therefore, is intimately linked with what the Indic tradition calls *darshan*, the ritual act of seeing divinity' (Fuller, 2009, pp. 10–11).

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charged experience of coming to know, yet never fully arriving at complete and definitive knowledge. What emerges is the fact that the art preached by Socrates does not and, indeed, should not lead to fixed and definitive conclusions. On the contrary, the experience of wonder that makes a philosopher is one of constant doubt.

Box 1.1 Theaetetus

Socrates: *I fancy, at any rate, that such [logical] puzzles are not altogether strange to you.*
Theaetetus: *No, indeed it is extraordinary how they set me wondering whatever they can mean. Sometimes I get quite dizzy with thinking of them.*
Socrates: *That shows that Theodorus was not wrong in his estimate of your nature. This sense of wonder is the mark of the philosopher. Philosophy indeed has no other origin, and he was a good genealogist who made Iris the daughter of Thaumas.* (Theaetetus 155d)

The above passage is often cited in philosophy textbooks because of its conclusion. The discipline that cultivates one's love of wisdom is said to originate in wonder according to one of the world's best-known philosophers. Socrates was introduced to Theaetetus by Theodorus, the boy's mentor in mathematics, a topic the young man excelled at. In order to test his inclination for philosophy, however, Socrates proceeded by helping Theaetetus reflect on the nature of knowledge only to show him how easy it is to end up in contradiction. To this, the young man responded with bewilderment, recognizing that his thinking had been brought to a complete standstill. Yet, he also felt 'giddy' about discovering what things can mean, a quality that instantly recommended him as a good student of philosophy. The combination of immobility and alert movement, impasse and turmoil, characterizes Socratic wonder, and as we will see, it leaves an important mark on our thinking about this phenomenon to this day.

Socrates had two interesting metaphors for this practice. One of them is that of *midwifery*. In this role, the philosopher is tasked with helping others bring nascent thoughts into being and inspecting the outcomes of these 'births'. As Plato's dialogue shows, these thoughts are, in fact, mostly unsatisfactory, and as such, the practice of midwifery needs to go on, uninterrupted. Of course, just like real births, this process can be tiring and frustrating. This is why Socrates also saw himself as a *gadfly* who constantly annoys others out of their feeling

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of smug certainty (a destabilizing role in society that ultimately led to him being sentenced to death for corrupting the minds of the youth[iv]). Instead of certitude, wondering makes us aware, at all times, of our limitations and lack of knowledge.[11] Why, then, would anyone engage in it?

As Socrates argues, such experiences make us better, more humble thinkers. They do result in knowledge, but *knowledge that one does not know*. This, he insists, is 'all my art can achieve – nothing more' (210c).

Aristotle agreed with Socrates, in his *Metaphysics*,[12] that philosophy started when people began to wonder. In saying this, however, he had quite a different relationship between wonder and knowledge in mind. For him, wonder is motivated by a strong desire to understand and ends in the acquisition of knowledge. Interestingly, Aristotle also recognized the emotional nature of wondering (including its links to desire and pleasure) and the fact that we need to be alleviated from the tension it puts us through in pursuit of knowledge.[v] Wondering is vital for philosophy because it gives us the impulse to question things. But it is only a transitional phase: once we have our answers, we can move on. The end is, here, more noble than the beginning.[13]

There is a clear contrast between Socratic and Aristotelian wonder. The former designates a never-ending process of searching for wisdom. The latter concerns the acquisition of knowledge as an end state and focuses our attention on the right methods for reaching it. Socrates celebrates not knowing as fundamental for wonder; Aristotle is concerned with how we can overcome this condition through wondering. Despite these differences, Socrates, Plato and Aristotle all saw wonder as a positive phenomenon, an essential aptitude for engaging in philosophy and for living a good life. The tension between their accounts, however, will play out in seventeenth-century philosophy and, in many ways, continue to shape our thinking today.

[iv] And, in fact, Plato's dialogue ends precisely with Socrates going off to face the charges brought against him. In this way, Plato outlines, in *Theaetetus*, a defence of the methods and role of his master as a promoter of wonder.

[v] 'The wondering mind is not just in a state of disoriented agitation. It yearns for relief from its own bitter-sweet perplexity. These connections with desire give Aristotle's version of the thinking inspired by wonder an orientation that will prove crucial in later developments. The thinking which begins in wonder is distinctive in having as its rationale the pursuit of knowledge for its own sake. It has no end or purpose, other than the alleviation of wonder' (Lloyd, 2018, p. 25).

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1.2 First among passions

Middle Age thinkers, by and large, adopted an Aristotelian approach to wonder. This is how, for instance, Adelard of Bath, twelfth-century philosopher, thought that knowing the cause of things 'cures' us of childish wonder; Albert the Great thought wondering befitted women and children but not mature philosophers; and Thomas Aquinas advocated curing oneself of as much *admiratio* as possible or risk becoming intellectually lazy.[14] On the other hand, Augustine saw wonder as highly salutary and the proper reaction to God's creation,[15] a reminder of the Socratic humility that comes out of experiencing the wondrous. At the same time, between the twelfth and fourteenth centuries, there was a considerable expansion in stories of ghosts, monsters and miracles that made many consider Europe 'awash in wonder' during this period.[16] Moreover, as the end of the Middle Ages saw new trade routes open with faraway places, the accumulation of exotic objects increased, culminating in the famous 'cabinets of curiosities' (*Wunderkammern*), precursors of modern museums but accessible at the time only to royalty or the very rich.[vi]

It is against this complex background of ambivalence towards wonder that we need to place Descartes' seventeenth-century account of it. Generally considered the father of modern philosophy, Descartes saw wonder (*l'admiration*) as an epistemological passion given its emotional and cognitive nature and the fact that it is triggered by experiencing unusual objects.[vii] More than this, if our passions reveal a certain judgement of approval or disapproval towards an object, wonder doesn't, as it marks our first contact with and reaction to it.[17] It thus earns the status of 'first of the passions'.[18] Before an appreciation of good or evil, love or hatred, joy or despair, there is the act of wondering, simply pointing to what takes us by surprise.

[vi] Interestingly, these cabinets were meant to cultivate wonder while, at the same time, doing away with it. Francis Bacon, for example, was a great supporter of collecting and classifying every strange object or inexplicable event.

> He was hoping to compile every last marvel into a complete scientific *Wunderkammern* of sorts, conceived that a total catalogue of all 'preternatural' phenomena would give rise to new laws that would account for every seemingly irregularity. Wonder, in other words, would serve its own demise, giving way to an exceptionless knowledge of causes. Bacon therefore called wonder 'broken knowledge', a signal of the incompletion of the inquiry it provokes. (Rubenstein, 2008, p. 15)

An Aristotelian inspired view of wonder's relation to knowledge, as far as we can see.

[vii] His list of 'primary passions' included love, hatred, desire, joy and sadness. What gives them this status is the fact that they are considered irreducible to other emotions.

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scenes can inspire fear and yet, nonetheless, they both attract and delight us. This is, in fact, the intriguing nature of Burke's sublime: it's a mixture of pain and pleasure. It is terrifying to witness scenes and landscapes that overwhelm us, but, being away from any real danger, it makes us experience satisfaction at being utterly wonderstruck (in 'a sort of tranquillity shadowed with horror').

In essence, the sublime designates a particular kind of experience, typically overwhelming, of landscapes or scenes that leave us both *terrified and delighted*. This rather contradictory nature of the sublime, the highest level of astonishment, makes it, according to Burke, one of the strongest emotions we are capable of feeling.[x] Its unique combination of emotions builds upon old associations between wonder and both the uncomfortable feeling of not knowing and the pleasures of getting to understand. Nonetheless, the sublime is not synonymous with wonder. What is specific for it is the element of terror or horror which has little to do with previous accounts and is rarely reflected in how we conceive of wondering today. And yet, with his notion of the sublime, Burke separated wonder from reason with long-lasting consequences.

If Socrates pointed to the state of being blocked and Descartes lamented the perplexity associated with wondering, they nevertheless related it back to thinking. The sublime makes us appreciate astonishment in its own right and stop asking whether or not it strengthens our thinking. To experience the sublime is very different from engaging in shallow forms of intellectual curiosity. It can, and should, transform our experience of world and self.

It was Burke's contemporary, Immanuel Kant, who reclaimed the sublime for reason.[23] In fact, reason itself was, for Kant, the most suitable object of wonder. In his essay, *Observations on the feeling of the beautiful and sublime*,[24] first published in 1764, Kant distinguishes between the terrifying sublime (associated with a feeling of dread), the noble (associated with quiet wonder) and the splendid (associated with beauty). How is reason called upon by the sublime? Because in experiencing it, our imagination grapples to understand something that lies beyond its limits. This is why, in fact, it is not the outside world where the sublime originates but within the mind of the perceiver. The wondering mind

[x] The sublime, according to Burke,

> produces a sort of swelling and triumph that is extremely grateful to the human mind; and this swelling is never more perceived, nor operates with more force, than when without danger we are conversant with terrible objects, the mind always claiming to itself some part of the dignity and importance of the things which it contemplates. (Lloyd, 2018, pp. 58–9)

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and its thought processes are, thus, the first and foremost source of the sublime.[xi] Reasoning about them is the mission of the philosopher.

In the decades that followed, the Romantics took over the sublime but preferred Burke rather than Kant's reading of it. In this way, they were able to name a range of powerful affective phenomena while keeping them separate from the work of reason. To this day, the sublime corresponds to aesthetic theory and is considered in its relation to nature and art rather than scientific pursuits. What the eighteenth and nineteenth centuries accomplished above all, however, was to set up a rather misleading dichotomy between curiosity as a more intellectual emotion and the sublime, associated with trembling awe. Wonder's unity between these two 'sides', specific for ancient accounts, was questioned first by Descartes' critique of the role of wondering in thinking and, later on, by Burke's separation between them. At best, these two facets became different expressions of wonder. At worst, wonder itself turned into a tamed version of the sublime.[25]

1.4 Wondering today

The history of wonder, from what we could see above, is marked by tensions between different, at times contradictory, accounts. Socrates emphasized the benefits of knowing the fact that one doesn't really know, Aristotle considered its importance for getting to know. Descartes saw it as a passion that can interfere with exactly this process, Spinoza said it is a necessary moment of thinking.[xii] Burke separated it from reason, Kant made it a condition for reason.[xiii] In each case, wondering about wonder was shaped by larger historical debates concerning knowledge and ignorance, movement and pause in thinking, emotion and cognition. Twentieth-century philosophers were bound to enter the same maze, yet they did so by adding new dimensions to it.

After the Enlightenment and Romanticism, the topic of wonder had been all but integrated within the sublime. This movement obscured, among others, wonder's relation to intellectual pursuits assigned now primarily to curiosity. In this context, Heidegger is to be credited for referring back specifically to wonder

[xi] 'Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily reflection is occupied with them: the starry heaven above me and the moral law within me' (Kant, 1997, p. 133).
[xii] Wonder referred to here as admiration.
[xiii] In this case, discussing the sublime (closer to awe and astonishment).

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(and not the sublime, admiration or astonishment) in his attempt to reconnect to its original (and largely positive) meanings from Greek sources. In particular, he saw wonder as a state of dwelling or 'questioning that asks what the most usual might be such that it can reveal itself as what is most unusual'.[26] This is already an interesting break with the seventeenth-century focus on rare, unfamiliar and unexpected events as triggers of wonder and the eighteenth-century obsession with grandiose scenes and experiences. Wonder can and should be found *in the everyday*, including within the most common and familiar settings. This is because the main function of wondering, according to Heidegger, is to direct us to the strangeness of the everyday and the discovery of the mysterious within the ordinary.[27]

The Heideggerian rediscovery of wonder was critically considered by Hannah Arendt, who added an important political dimension to it. Her questioning came out of a broader concern for why Heidegger himself did not wonder about the advancement of Nazi ideology and continued to serve under it (see also Box 8.2). The answer, for Arendt, goes back precisely to the notion of the everyday. To understand it fully, we can return to a story told in *Theaetetus*, that of Thales of Miletus who, gazing at the stars above, ended up falling into a well. Wondering about a common sight made him unaware of the dangers lying in front of him. Did a similar thing happen to Heidegger? Was he too concerned with wondering about familiar philosophical topics that he became unaware of what the Nazis were doing around him? And, if so, is wondering supposed to distract us from being a critical and engaged citizen? Arendt refused this view. She, in fact, saw wonder as a key process in confronting unexamined opinion, an ally to our critical judgement which is the most political of man's abilities.[28] Another ancient Greek idea is rediscovered here: the wondering philosopher as a gadfly attacking deeply held social beliefs.

Box 1.3 How Do We Study Wonder?

One of the main features of contemporary approaches to wonder has to do with its empirical study. If philosophers of the past were content to use introspection and generally meditate on the meanings and value of this phenomenon, wondering about wonder today is supported by new scientific and methodological developments within psychology, neurology and cognitive science. For example, Gallagher, Reinerman-Jones, Janz, Bockelman and Trempler took on the ambitious aim of building a neurophenomenology of awe and wonder. And they did so by replicating the experience of space travel in a

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mixed reality simulation, in the lab, as a way to study directly and rigorously manner, the awe and wonder clearly experienced by astronauts. A similar concern for reproducing intense emotions such as awe in a laboratory setting led Chirico, Ferrise, Cordella and Gaggioli[29] to build virtual reality scenes that can simulate it. They noticed, in the process, that virtual environments induced significantly more positive than negative affect. Are we, here, on the verge of eliciting something close to the sublime but with new technological means? And are these studies telling us something we did not know from centuries of philosophizing about awe, wonder and the sublime? It is important to note that recent experiments like the ones above certainly build on the long history of awe and wonder in order to define and create the conditions supposed to stimulate both. They also capitalize on the use of modern technologies, in particular, immersive online environments and virtual reality, that were not accessible – or even conceivable – centuries before. Whether these new tools can bring us considerable new knowledge remains, for the moment, an open question.

What about today? What do contemporary, twenty-first-century views of wonder take from this long and complicated history? It is, I think, safe to say that the history briefly sketched above is still with us, reflected in both scientific studies of wondering (see Box 1.3) and lay uses of the term. Wonder is nowadays connected to not knowing, wanting to know, getting to know and everything in between.[xiv] It is deeply emotional, but still bound to thinking. It helps us make the familiar unfamiliar as well as the other way around. Wonder, thus, with all its inherent contradictions (or because of them!) became a highly *versatile* concept that covers a wide range of phenomena touching on curiosity, surprise, awe, astonishment and the sublime. Historically classified under these terms, wonder is emerging as the broader category that helps us integrate multiple dichotomies and overcome the numerous contradictions referred to above. This, in any case, is the proposition I put forward in this book, starting with the next chapter.

Notes

1 Gallagher, Reinerman-Jones, Janz, Bockelman & Trempler (2015), p. 116.
2 Rubenstein (2008), p. 9.

[xiv] According to Fisher (1998, p. 41), philosophy 'begins in wonder, continues on at every moment by means of wonder, and ends with explanation that produces, when first heard, a new and equally powerful experience of wonder to that with which it began'.

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3 https://en.oxforddictionaries.com/definition/wonder. Accessed 23 January 2020.
4 Fisher (1998), p. 55.
5 Verhoeven (1972), n.a.
6 Johnson (2010), p. 828.
7 Parsons (1969), p. 85.
8 Glăveanu (2019c), p. 2.
9 For more extensive presentations of the history of wonder, I recommend reading Daston and Park's (1998) *Wonders and the order of nature, 1150–1750*, Fisher's (1998) *Wonder, the rainbow, and the aesthetics of rare experiences*, Rubenstein's (2008) *Strange wonder* and Lloyd's (2018) *Reclaiming wonder after the sublime*.
10 See the 1903 edition edited by Burnet.
11 Lloyd (2018), p. 17.
12 See the 1984 translation by W. D. Ross in the edition edited by J. Barnes.
13 See Lloyd (2018), p. 28; also Nightingale (2001), p. 43.
14 Rubenstein (2008), p. 13.
15 Vasalou (2012), p. 37.
16 Bynum (1997), pp. 2–3.
17 Kareem (2014), p. 36.
18 See Descartes' *The passions of the soul*, 1989 edition.
19 Rubenstein (2008), p. 15.
20 Lloyd (2018), p. 33.
21 Lloyd (2018), p. 34.
22 See Spinoza's *Ethics*, the 1996 edition translated by Edwin Curley.
23 Lloyd (2018), p. 63.
24 See the 1960 edition translated by J. T. Goldthwait.
25 Lloyd (2018), p. 78.
26 Heidegger (1994), p. 148 (the original published in 1938).
27 Lloyd (2018), p. 10.
28 See Arendt (1977).
29 See Chirico, Ferrise, Cordella & Gaggioli (2018).

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Figure 2 The Illustration of Grief from the First Edition of Darwin's *Expression of the Emotions in Man and Animals*.
Note: Published by J. Murray, London, 1872. Image courtesy of the Beinecke Rare Book & Manuscript Library, Yale University. This work is in the public domain.

recognized. His pioneering book from 1872 gave us, therefore, not only an early example of a psychological survey but also a richly illustrated collection (see Figure 2).

One of the key questions raised by Darwin concerning the innate versus cultural nature of our emotions – or, at least, our expression of them – is important for wonder as well given that this phenomenon certainly has a strong emotional component (as we have seen in the previous chapter). But, unlike the basic emotions of Darwin and those who continued his legacy,[2] wonder is a much more complex phenomenon that involves everything from perception to social interaction. This is the reason why wonder, just like awe and curiosity,

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which are closely related phenomena, rarely features in lists of 'basic' or universal emotions or forms of expression.[i]

There is virtually no study focused on the facial expression of wonder because of this, just as there are very few studies of curiosity.[ii] More research has been conducted on awe given that, from the three processes, it seems closest to Darwin's basic emotions. In fact, Darwin himself was interested in the related phenomenon of admiration which he considered to be a combination of surprise, pleasure, approval and astonishment, bodily signs of the latter including 'raised eyebrows, bright eyes, gaping mouth, and, in extreme cases, hair standing on end, or goosebumps'.[3] In more current research, Shiota, Campos and Keltner found that displays of awe frequently include raised inner eyebrow, widened eyes and an open, slightly drop-jawed mouth.[4]

Informed by these old and new studies, let us return to the face of wonder. One way through which we can obtain interesting information about its expression or, better said, the social representation of its expression is by typing the word 'wondering' in a Google Images search engine and examining the result.[iii]

What an analysis of the first one hundred images as ranked by Google on 22 May 2019 revealed was a wealth of information about facial and bodily postures when it comes to representations of people who wonder. These images depicted a total of 35 men, 27 women, 14 children, 3 animals (e.g. chimp, dog), 1 other (a cartoonish pizza slice with human features) and 15 generic pictures of human bodies. In terms of facial expression, 22 of the people represented had one eyebrow higher than the other, 20 had raised eyebrows and 10 of them frowned. The mouth was pointing down in 27 cases, up (including in a smile) in 13; 9 had pursed or tight lips, 8 the mouth in the shape of the letter O and 1 the mouth in the shape of the letter S. When it came to posture, almost two-thirds of the images (63) showed people touching or holding their chin or cheeks with either one finger or the whole hand, 5 scratching their heads, 5 holding their arms out (suggesting the 'I don't know' posture), 4 holding one or both arms on

[i] Ekman (1994) did include awe as a potential 'pan-cultural' emotion with amusement, contempt, contentment, embarrassment, excitement, guilt, interest, pride in achievement, relief, satisfaction, sensory pleasure and shame.

[ii] In this regard, Nojavanasghari and colleagues (2016) used a dataset including hundreds of videos of children being curious and offered only a general list of visual, auditory and verbal behaviours that are important for recognizing curiosity: (1) observing a new object; (2) inspecting the object; (3) carrying out manipulatory behaviours; (4) thinking; (5) asking questions and making comments on the topic and (6) dominating the interaction.

[iii] I did not type in 'wonder' directly given the fact that there was a 2017 movie with the same name, plus the Wonder Woman movie, which both feature extensively in the results of the search.

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their hips, 2 folding their arms and 2 supporting their head between their hands. Interestingly, almost a third of the images (32) included one or multiple question marks. What does this imply? That wondering is associated with questioning, doubt, surprise and uncertainty, including frustration – let's remember that more people had the corners of their mouths pointing down than up. The most common wondering posture included touching one's chin, pensively, and, at a facial expression level, raising one eyebrow more than the other (perhaps a mark of suspicion?).

I also wanted to see how these popular representations might compare to those for curiosity and awe.[iv] The top 100 images for a curious face already showed an interesting difference in terms of age, with 27 instances of children and even babies, suggesting the fact that curiosity is often associated with lower ages compared to wonder. The dominant facial expression is slightly different, with raised eyebrows being most frequent (23), followed by one eyebrow raised higher than the other (18) and frowning (2). The mouth in these cases was equally likely to point upwards or downwards (17 instances each), and there was a higher number of mouths making an O shape (11) than for wonder. Finally, the number of people represented with their hands touching or supporting their faces was much lower (21). This implies that curiosity is closer, in its imagery, to surprise than wonder is (raised eyebrows, mouth in O) and perhaps associated with more positive emotions. Unexpectedly, only 3 images showed question marks.

Last but not least, awe. A similarly big number of children or babies (23) were depicted in the first 100 images of being 'in awe', alongside men (30), women (24) and, in addition, groups of people (5). The facial expression of those in awe is clearly marked by raised eyebrows (16) and wide eyes (11), with much less frowning (3) or wonder-like differently positioned eyebrows (1). The mouth is mostly open, often the jaw is dropping (28), but many are also smiling (24) compared to looking sad or frustrated (5). The most common posture was holding one's hands raised to the sky (9), perhaps as a sign of letting oneself go or feeling defenceless, exposed. Very few people held or touched their chin or cheeks (2), held their head between their hands (2) or had their hand over the mouth (1). What we can see here, therefore, is an interesting overlap between curiosity and awe when it comes to the element of surprise (raised eyebrows)

[iv] Once more, it was not feasible to search directly for these terms because they each led to top images that represented popular culture rather than actual people, so, instead, I opted for 'curious face' and 'in awe'.

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and a more positive mood, but also awe's specificity which is the sensation of being overwhelmed.

Of course, some might raise here the issue of the type and size of the sample used. It is certainly not enough to take 100 images, even if they are the highest ranked by a popular search engine, and make any conclusive statements about the expression – and even less about the phenomenology – of states as complex as wonder, curiosity and awe. Yet this is a good starting point for a much deeper conceptual analysis. Wonder seems, at a social representation level, to be closely associated with doubt, suspicion, critical thinking. And these processes are often experienced as uncomfortable – they are unsettling, as Aristotle reminds us. Interestingly, there are also multiple continuities, as well as discontinuities, between wonder, curiosity and awe and, as we shall see in the next chapter, other related phenomena such as pondering and contemplation. There might be no specific 'face' of wonder (or awe, or curiosity), but its different 'faces' are highly familiar to us. After all, we see and depict them on a daily basis.

Notes

1 See the 1965 edition published by the University of Chicago Press.
2 See, for example, the landmark research of Ekman & Friesen (1971).
3 Keltner & Haidt (2003), p. 302.
4 See Shiota, Campos & Keltner (2003). Also Cotter, Silvia & Fayn (2018).

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wondering and that this environment is built differently across cultures, just as it was across historical time.[8]

In this book, I will explore such developmental, cultural and historical variations of the wondering mind and do so by expanding first the scope of wonder in order to capture its 'entire' vocabulary. This expanded lexicon includes, as we shall see, other common (and popular) notions such as curiosity, awe, contemplation, astonishment, marvel, pondering and so on. By including all of these under the label of the 'wondering mind' I am not trying to erase the differences between them. On the contrary, I will use these differences to position wonder per se within this complex landscape in ways that both show its continuity with related experiences (such as curiosity and awe) and set it apart from them. The structural model of wondering I propose ultimately reveals wonder as a paradoxical state – the kind of paradox we have been comfortably living with for a long time, in both evolutionary and developmental terms.

2.1 A complex vocabulary

People talk about wonder and display it in various ways, as demonstrated by the small research on facial expressions presented before this chapter. They also talk and display curiosity and awe in ways that are sometimes similar, sometimes different from wonder. While this is by no means unexpected, an important question remains: How do we disentangle wonder's meaning from that of other, closely related concepts? And, in the end, do we even need to engage in this exercise?

First of all, we should note that there are a range of emotions that have been historically associated with wonder, from marvel and dread to amazement and terror.[9] Second, that context often determines the exact meaning of these different states as none of them has a fixed historical connotation.[ii] Last but not least, it is phenomenologically complicated to disentangle the emotions referred to above and their relation to wonder because they all participate in creating unique mixes and singular experiences.[iii] This is always the case when

[ii] 'Wonder is part of a broad and shifting semantic field in late seventeenth- and eighteenth-century psychology and aesthetics that at various times includes surprise, curiosity, admiration, suspense, stupor, awe, amazement, and astonishment. Context determines wonder's closeness, at a given moment, to cognitive passions like curiosity or aesthetic categories like the sublime' (Daston & Park, 1998, p. 15).

[iii] 'Wonder is sometimes an important ingredient in other emotions. In grief there is, I think, often a kind of wonder – in which one sees the beauty of the lost person as a kind of radiance standing at a very great distance from us' (Nussbaum, 2001, p. 54).

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looking at complex and compound emotional states, especially when the focus is on wondering which, for many authors, has several subcomponents, for example, cognitive, perceptual and spiritual.[iv] All these complications made psychologists rather confused about where to place wonder after all and how to conceptualize its connection with surprise, awe and curiosity.[v] In order to understand these connections, we need first to consider briefly these other states.

The two most important phenomena that wonder seems to pendulate between are awe and curiosity. In fact, the strongly emotional awe and cognitive (intellectual) curiosity *combined* is what makes up wonder for some scholars.[10] Others consider awe and curiosity to be two senses of the term 'wonder'.[11] In this book, I want to differentiate the three while emphasizing the fact that experiences of awe and curiosity can morph into wonder and the other way around. There is, therefore, more of a *continuum* than a strict or absolute separation between these states.

Curiosity is typically situated at the 'intellectual' end of the wondering spectrum. It designates a desire to know or learn about unusual things, people or events. This is why, for instance, curiosity is often cited as a key component of the creative self constantly looking for answers,[12] just as wonder is as well.[13] However, as shown in the historical presentation from the last chapter, many thinkers have been keen to distinguish between the two.

For example, Burke saw curiosity as the simplest emotion of our mind, quickly to come and pass, and contrasted it with the longer lasting and transformative sublime, the eighteenth-century incarnation of wonder.[14] For Heidegger as well, curiosity is lacking because it is concerned with getting to know rather than dwelling in uncertainty and the unknown specific for wondering.[vi]

[iv] 'Cognitively, wonder involves appraisals of perplexity – wondrous things are hard to fully capture in our conceptual schemes. Perceptually, wondrous things engage and captivate our senses. Spiritually, wondrous things are regarded with reverence; we look up to them' (Fingerhut & Prinz, 2018, p. 116).

[v] 'Psychologists continued to define wonder in a variety of ways and, in doing so, placed it in different relationships to surprise, awe, and curiosity. For example, Mercier (1888, pp. 352–3, 361) placed wonder in one category and the latter three in another. McDougall (1908), on the other hand, defined wonder as a primary emotion that accompanied the instinct of curiosity. More recently, wonder has been defined in a similar way to surprise (i.e., as a response to the unexpected; Frijda, 1986), and has been discussed in the sense of awe (Haidt & Keltner, 2004). In this latter sense, its status as an emotion has been questioned (Lazarus & Lazarus, 1994, pp. 129–36). On the other hand, Ekman and Cordaro (2011), who define wonder in contrast with awe, expect that wonder is an emotion for which evidence of universality will be found' (Lamont, 2017, p. 1).

[vi] Piersol (2013), p. 8. Also Rubenstein (2008, p. 28): 'curiosity has nothing to do with the contemplation that wonders at being, thaumazein, it has no interest in wondering to the point of not understanding. Rather, it makes sure of knowing, but just in order to have known'.

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2.4 A paradoxical state

In its 'pure' form, wonder is a rather paradoxical state of mind. This, as I will argue throughout the book, gives this otherwise ordinary experience its extraordinary power to transform our relation to ourselves, others and the world. This power stems precisely from the fact that, when we wonder, we do several things *at once*. We are amazed about what we see, hear or feel but, at the same time, burn with the desire to explore things further. We are closely connected with the object of our wonder while, at the same time, ready to reflect about it in a detached manner. We are thinking a lot about our own cognition even if wondering is 'hot', infused with affect and motivation. Finally, we are focused on the self while opening up to others and to their world.

Where does this leave the dichotomies mentioned in this chapter? Is wonder alternating between them, integrating them at all times, being pulled apart by them or transcending them altogether?[xviii] Once more, experiences of wonder do vary – personally and contextually – and, if the 'pure' form is able to accommodate activity and passivity, immersion and detachment *simultaneously*, this doesn't preclude undergoing these dimensions in turn, cyclically, or even experiencing some tensions between them. It is this unique feature, in the end, that places wonder at the centre and grounds it in the interplay between different faculties of the mind.[25]

In this interplay, for instance, we combine wonder with awe, with curiosity, with contemplation or with pondering (or several of them at once). But the important criterion, if we are to talk about wonder and not another mental process or emotion, is that all these tendencies need to be intimately and unmistakably *bound* to each other. Even when, for example, wondering about follows wondering at, it must do so in an integrated manner. Any break or separation between wondering at and wondering about, and especially the priority given to one over the other, radically changes the experience and turns it from wondering into something else.[xix] And, with this detournement, the promise of wonder weakens as well. To understand how we can hold on to this promise, though, we need to move from the structural to a more dynamic view of this phenomenon.

[xviii] 'Including both marvel's transfixed passivity and curiosity's active movement toward an object, wonder encompasses both stupefaction – "Ah!" – and recognition – "Aha!" – thereby *pulling in two different directions simultaneously*' (Kareem, 2014, p. 8; emphasis added).

[xix] Not worst, but different.

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