A Retrieval of Awe: Examining Disruption and Apprehension in Transformative Education

Todd B. Rowen
Columbia University

THE DECLINE OF WONDER IN ADULT ONTOLOGY

Wonder is generally recognized as the fiefdom of the young. As children, it seemed as if we regularly found ourselves enrapt in a state of awe. Dumbstruck, overpowered, yet ultimately transfixed by some external phenomena, we would regularly exist simply marveling at things from our surroundings. This amazing character of experience, once a regular fixture of our way of experiencing the world, has gradually ebbed — receded to the point where we barely experience wonder at all. Yet, where did this formative experience go? Did it gradually vanish as we assumed greater knowledge and mastery of our surroundings? Did it abandon us as we became routinely familiar with an increasingly finite set of rote experiences offered by our environment? Or was it at odds with an instrumental perspective of the world: a mindset we were expected to adopt in order to become effective adults — one that sees all objects as tools and stepping stones to improve our efficacy?

It is my belief that the relationship between awe and education is still uncharted terrain that requires further investigation. Any aesthetic state that accompanied the years when we were most profoundly transformed by education, which ebbed in direct variance as we learned fewer and fewer things over the years, may be an important component of educational development that warrants further study. Perhaps awe is more than a byproduct of those periods of tremendous learning and is often a catalyst of that learning.

SITUATING AWE AND WONDER IN AN EPISTEMOLOGICAL CONTEXT

Because philosophy arises from awe, a philosopher is bound in his way to be a lover of myths and poetic fables. Poets and philosophers are alike in being big with wonder.1

As we begin our investigation of wonder, it is important to try and frame it in philosophical terms. As the quotation from Thomas Aquinas suggests, philosophers have long been observed, not merely calmly taking stock of the world around them, but standing in wonder before it. In book two of The Life of the Mind, Hannah Arendt addresses the crucial sequential importance of wonder to good philosophy and rigorous thinking. Specifically, Arendt is concerned with the way in which being in a state of wonder serves as a catalyst to the act of thinking, and in turn, how the deeper thinking stimulated by this processes acts as an aegis against the perpetuation of human evil. Arendt, endorsing Plato’s view, sees the experience of wonder as the spark that leads to deeper levels of thinking: “In Greek philosophy, there exists…one answer to our question What makes us think?…It is the saying of Plato I have already cited, namely that the origin of philosophy is Wonder, an answer that in my opinion has lost nothing of its plausibility.”2 Wonder is what starts the human mind on its journey of trying to engage and investigate the world. That moment is what ultimately rouses individuals and inspires him or her to investigate and learn more.
However, beyond simply identifying the importance of wonder, we should define our terms. What is it, specifically? How best to describe this consuming state of apprehension? What precisely is this “initial shock that sends the philosopher on his way” that Arendt talks about and why does she describe wonder as “a shock” and also as “a pathos, something to be suffered”? An answer can be found in the work of Immanuel Kant and his description of the sublime character of aesthetic experience.

In the Critique of the Power of Judgment, Kant attempts to explain how a natural creature existing in a world of empirical experience can nevertheless transcend these conditions through application of their practical reason. For Kant, judgment acts as the vital facilitative bridge between understanding and reason, acting to distinguish and compartmentalize particular concepts under universal categories. Kant goes on to discuss two types of specifically aesthetic judgments that people can make — judgments that involve determining whether something is beautiful or sublime.

As opposed to the beautiful, which Kant understands as an object — the form of which, when contemplated in a disinterested fashion, provides a pleasurable experience — Kant understands “the sublime” as encapsulating anything that causes us to experience awe. It is the feeling often associated with the overwhelmingness of a thing, although as opposed to the beautiful, which can be attributed to objects such as a flower or a painting, the sublime it is not the thing itself, but rather the internal experience of an epistemological failure to understand: “That is sublime which even to be able to think of demonstrates a faculty of the mind that surpasses every measure of the senses.” In simpler language, the sublime is the feeling aroused by the attempt (and initial failure) of our imagination to comprehend overwhelming external phenomena which frustrate our imagination’s ability to make sense of them: “All that we can say is that the object lends itself to the presentation of a sublimity discoverable in the mind...[the sublime] concerns ideas of reason, which, although no adequate presentation of them is possible, may be excited and called into the mind by that very inadequacy itself which does admit of sensuous presentation.”

Perhaps the most important distinction between the beautiful and the sublime is that an experience of the sublime, at least initially, is markedly unpleasant and uncomfortable. While Kant believes that it is pleasing to observe a beautiful painting, the awe that we encounter at the hands of an experience of the sublime is a result of a two-stage sequence — the first stage of which seems to disturb and confound our sensibilities. For Kant, in the first moment we experience the world as counter-purposive. It is incommensurably foreign and literally outrages the ability of our mental faculties to make sense of the world. Thus, this first moment borders on being painful. However, Kant emphasizes that there is a second moment where our initial feeling of outrage is transformed into a feeling of satisfaction. Ultimately in the second stage, we enjoy this experience of being overwhelmed. Somehow our mind, arranges the overall experience into something pleasurable. The initial displeasure is redeemed. It demonstrates the transcendent aspect of our cognitive faculty, which is capable of thinking and demanding totality above and
beyond any merely sensible object. In the words of Susan Feagin, “on Kant’s view, this pleasure results from an awareness that we have powers of reason that are not dependent on sensation, but that legislate over sense. The sublime thus displays both the limitations of sense experience (and hence our feeling of displeasure) and the power of our own mind (and hence the feeling of pleasure.)”

**Drawing Parallels Between Wonder and the Sublime**

At this point, it is important to stress that wonder and the sublime are not identical terms. While both are consuming states of apprehension, an experience of the sublime typically suggests a sense of awe that dwarfs, humbles, or diminishes the individual, which doesn’t seem to be consistent with the pleasant, day dreaming connotation of the word “wonder.”

Yet, Arendt does not use wonder in the sense of “I wonder what’s on TV tonight,” but rather in the sense that “seeing the Grand Canyon is enough to fill anyone with wonder.” One important distinction between these two usages is that, in the former case, the experience of wonder is self-induced, while in the latter it is sparked by an interaction with a jaw-dropping, external phenomenon. Like the sublime, Arendt’s wonder is not a self-induced project and requires an external catalyst, presumably from nature: “The responding wonder, therefore, is not something men can summon up by themselves; the wonder is a pathos, something to be suffered, not acted…what sets men wondering is something familiar and yet normally invisible, and something men are forced to admire.”

In this regard, Arendt’s wonder shares strong similarities with the Kantian model. For Kant, an experience of the sublime cannot be self-stimulated and requires an interaction with a powerful external catalyst. However, the external phenomenon itself is not sublime, but rather a catalyst for an internal reaction to it: “Hence it is the disposition of the mind resulting from a certain representation…but not the object which is to be called sublime.” Thus, even if it occurs internally, an experience of wonder or the sublime must be stimulated from external circumstances, which seem to entail an encounter with some powerful experience in the world.

Furthermore, that Arendt’s wonder is “a pathos, something to be suffered” seems consistent with the initial unpleasantness that Kant ascribes to the first stage of sublime experience. Arendt’s experience of wonder is not a simple or mild activity — it possesses a deeper tension. Within an experience of wonder lies a dissonance between a mystery that refuses to be quantified and the inchoate yet undeniable harmony beckoning beneath it. Yet, like the Kantian model, something inherently remains beyond the observer’s conceptual grasp. We see a mind wrestling with the demand for totality above and beyond any merely sensible object. Or, as Arendt put it, the sense of the sublime “can never concern anything particular but is always aroused by the whole, which, in contrast to the sum total of entities, is never manifest.”

**The Educative Value of the Sublime**

I mused at the beginning of this essay that perhaps a feeling of wonder was inversely proportional with the instrumental worldview we adopt as efficacious
adults. Is it wrong, therefore, to ask if there is an actual *educative value* to an 
experience of the sublime? I would argue not. In this next section, I will suggest that 
an experience of the sublime can serve a very specific educative function: it can help 
us see beyond our fixed conceptions of understanding the world. This claim becomes 
justified in light of the work of Jean-Francois Lyotard, whose work with aesthetics 
was concerned with precisely that issue.

Although attention to Kant’s work about the sublime gradually ebbed within the 
broader philosophic discourse, Lyotard has recently championed its relevance. In 
his 1982 essay, “An Answer to the Question: What is the Postmodern?” Lyotard 
argues that the place of art is to disrupt our fixed and instrumental ways of viewing 
the world. Art has the potential to frustrate and challenge our mindsets by showing 
us that “the world in which we live is discontinuous and not capable of being 
explained entirely by any rational system. In fact the point of art for Lyotard is its 
ability to highlight the failings in such systems.”

Lyotard appealed to the disruptive nuance of the sublime, highlighting the 
ability of works (artistic or literary) to frustrate our rational sensibilities and 
frameworks. Engagements with works that trigger a sublime experience emphasize 
the conclusion that there is something that cannot be presented. The initial moment 
of outrage we feel when we encounter an object is the moment when our established 
patterns for compartmentalizing and grouping experience are shown to be inade-
quate. Our way of representing and understanding the world becomes over-
whelmed in a process that temporarily illustrates how our totalizing unilateral 
explanations for reality are really just dangerous paradigmatic assumptions. The 
role of art (especially postmodern art) is not to affirm our constructions and 
narratives of our culture, but to throw them into shock.

The postmodern would be that which in the modern invokes the unpresentable in presenta-
tion itself, that which refuses the consolation of correct forms, refuses the consensus of taste 
permitting a common experience of nostalgia for the impossible, and inquiries into new 
presentations — not to take pleasure in them, but to better produce the feeling that there is 
something unpresentable.

Thus, Lyotard draws heavily upon the ability of the sublime to outrage our logical 
faculties. However, as opposed to the Kantian impact of the sublime — which is 
limited to overwhelming our imagination’s capacity to make sense of scope or 
magnitude or likewise outraging our will in feeling that it can enact any influence 
or power over that object — Lyotard locates these outrages in our established 
patterns of thinking. He sees the outrages as occurring to our systems of thought:

[S]ublime feeling is analyzed as double defiance. Imagination at the limits of what it can 
present does violence to itself in order to present that it can no longer present. Reason, for 
its part, seeks, unreasonably, to violate the interdict it imposes on itself and which is strictly 
critical, the interdict that prohibits it from finding objects corresponding to its concepts in 
sensible intuition.

Thus, if a reader had been raised in a society where there had never been such a thing 
as private property, a novel that somehow presented a world of capital and personal 
ownership, might be so foreign that it would alarm the reader’s sensibilities. For 
Lyotard, this is the essential role artistic expression serves in the public sphere, 
preventing any single totalizing system from taking hold.
Thus far, I have been claiming that the condition of being in awe plays an important unsung role in the learning process. Lyotard attributed sublime experience with helping us negotiate with foreign conceptual frameworks. The disruptive shock of the sublime is the mechanism through which our conceptual frameworks expand to grapple with radically alternate approaches. To further concretize his point, I’d like to introduce some descriptions from psychological research about transformative learning.

With the term “transformative,” I am deliberately appealing to Philip Jackson’s distinction between mimetic and transformative teaching approaches from his work *The Practice of Teaching*. Therein, Jackson demarcates between “two distinguishably different ways of thinking about education and of translating that thought into practice” which he entitled the mimetic and the transformative.\(^{14}\) Jackson describes the mimetic style as giving “a central place to the transmission of factual and procedural knowledge from one person to another through an essentially imitative process.”\(^{15}\) The mimetic style involves a teacher as subject-matter specialist (of a certain body knowledge previously lacked by the student) passing this knowledge to the student. The process is regarded to be successful when the student can mirror or reproduce the knowledge, demonstrating that the student possesses it now as well as the teacher.

In contrast, the transformative tradition is not concerned with transmitting specified units of knowledge and instead focuses on affecting some fundamental change in the moral, philosophical, or psychological outlook of the student. It lacks a distinct methodology and curriculum, but encompasses “a qualitative change often of dramatic proportion, a metamorphosis, so to speak. Such changes would include all those traits of character and of personality most highly prized by the society at large.”\(^{16}\)

Cementing the Link Between Disruption and Transformative Learning

Rather than rely on Lyotard’s conjecture about the causal link between a transformative educative moment and the sublime, I want to address these ideas from Edward Taylor’s article, “A Learning Model for Becoming Interculturally Competent.” Living in and acclimating to a vastly different culture is one of the most common experiences that produces a notable transformative change in the individual and their worldview. Taylor summarizes the ample psychological research about adapting to life in a foreign culture and striking parallels emerge — in sequence, affect, and consequence — between intercultural transformation and an experience of the sublime.

First, like the sublime, intercultural transformation requires a two-stage sequence. The individual learner must necessarily pass through the unpleasant first stage “culture shock” in order to achieve the positive effects of the transformation: “Within the framework of intercultural transformation, culture shock is a neutral concept that becomes a precondition, acting as the core experience...that the stranger must transcend to achieve a higher state of cultural awareness....”\(^{17}\) This first stage of intercultural transformation is inherently disruptive and painful...
because it frustrates the existing frameworks that the individual has relied upon to
understand the world: “A perspective transformation can occur…through a series of
cumulative transformed meaning schemes….Often these experiences are stressful
and painful, and can threaten the very core of one’s existence.”¹⁸ As the individual
encounters a new culture with entirely different customs and behaviors, they
experience this culture shock that begins with an unpleasant initial stage, as their
framework for making sense of the world is thrown into shock. Later, as the
individual’s perceptual lens expands to incorporate their new experience, this
experience is redeemed and becomes pleasurable.

This psychological data seems to support the idea that, preceding a powerful
transformative experience, often the learner must first undergo some sort of two-
stage, unpleasant interaction with an external experience, which in the jolt of the first
stage frustrates and outrages the ability of their mental facility to make sense of the
world and leads them to experience the world as counter-purposive. In the second
stage, their faculty of reasoning expands to envelope this experience as part of its
larger framework for sense making.

**Incultating Awe: The Torpedo Fish as a Transformative Teaching Heuristic**

Thus far, I have been concerned with emphasizing the role that states of
consuming apprehension play in epistemology. I have examined Arendt’s concep-
tion of wonder and tried to draw parallels between this and Kant and Lyotard’s
discussion of the sublime. More recently, I’ve correlated the symptoms and rewards
of these states with psychological data about the drastic transformation of perspec-
tive that emerges from culture shock. From this point I would like to turn from
making general educational observations towards examining the conclusions that
emerge by situating disruption within the locus of a teacher-student relationship.
Specifically, I want to examine one model of the teacher, the torpedo fish, and note
its important role in precipitating the two-stage process of transformative learning.

After her discussion of wonder in *Life of the Mind*, Arendt draws our attention
to the educative model of Socrates and the three metaphors of his teaching: gadfly,
midwife, and torpedo fish.¹⁹ These three roles – which Plato discusses in *The
Apology*, *Theaetetus*, and *Meno*, respectively — all characterize a specific
propaedeutic relationship Socrates adopts with his students in order to induce
learning. I believe the torpedo fish model allows us to concretize the link between
disruption and transformative education.

I would like to suggest that the Socratic model of the torpedo fish is, in fact, an
embodied model for inculcating the first stage of the sublime in a student. Specifi-
cally, the sting of the torpedo fish acts as a valuable disruptive procedure setting the
stage for the student to transcend the limitations of socially constructed thinking
frameworks — opening the way for new, radical, and transformative perspectives
to be adopted.

Socrates is likened to the torpedo fish by Meno because, during their educative
inquiries, Socrates often manages to infect his student with his own stupor and
astonishment; thus resembling “the broad torpedo fish, for it too makes anyone who
comes close and touches it feel numb.” This approach should be seen as dissimilar from the Socratic gadfly, which merely rouses sleepers from their intellectual lethargy. The gadfly challenges lazy thinkers to engage their intellectual duties, whereas the torpedo fish seems to take an active and engaged learner and invalidate the very instrument of reason they use to think, resulting in a type of intellectual paralysis. As Arendt said: the sting of the torpedo fish involves “a dazing after-effect when you come out of it, feeling unsure of what seemed to you beyond doubt while you were unthinkingly engaged in whatever you were doing.”

However, what purpose could stultifying a student’s ability to think serve? This disruption is neither pleasant nor seemingly helpful; it results in a student who feels overwhelmed, frustrated, and, henceforth, averse to the learning process. The torpedo fish does not simply identify errors in a student’s logic, nor merely thwart a particular avenue of a student’s investigations. Rather, in the case of the torpedo fish, the student becomes so overwhelmingly perplexed, so flabbergasted, that their whole faculty of reason seems to shut down altogether. They become numb.

Since this does not sound like a constructive educative model, why then, would overwhelming a student’s basic capacity to think be a positive development or ever warranted? One answer is that there is an important heuristic application of the torpedo fish: enabling the student to expand the limitations of socially constructed frameworks of understanding reality. Sometimes, our entrenched modes of perception are so deeply married to our vision we cannot recognize that we are wearing distorting lenses at all. Thus, often any attempt to grasp a radically different framework for understanding the world can be futile because the concepts and landmarks against which we digest these new ideas are inherently irreconcilable with the new form of perception.

It is here that the effect of the torpedo fish is warranted. As with the intercultural discussion of culture shock, in order to prime oneself to abandon an old framework and entertain a new one, the student must undergo an unpleasant separation. Likely they will be reluctant to do this, as all of their cognitive abilities have previously been organized around developing a consistent explanatory lens through which to view the world. All of the cognitive tools they normally utilize to make sense of a new idea are tools that helped enshrine that old worldview; thus these ways of evaluating new claims are inherently hostile to any perspective that renders them obsolete. In order to allow oneself to abandon an old framework and adopt a new one, the student may need to be shown the fatal shortcomings of the cognitive processes associated with their old framework. They may need their old way of thinking to be shown as insufficient, inadequate or ill-equipped to understand this new mode of thinking. Thus, the torpedo fish stuns the student. As Meno said to Socrates: “you have had that kind of effect on me, for both my mind and my tongue are numb, and I have no answer to give you. Yet I have made many speeches [about Virtue, a topic on which Meno regarded himself as an expert] before large audiences on a thousand occasions, very good speeches as I thought, but now I cannot even say what it is.” In the aftermath of this process, when the student’s cognitive apparatus itself seems derailed, the student may then be receptive to an alternate approach to the world that
can provide a more robust explanation — and the teacher can begin gently laying down the new beams and floorboards of this more comprehensive architecture.

CONCLUSION

What I have sought to show is that these disruptive, but consuming states of apprehension — call them awe, wonder, or the sublime — are all more vital to education than widely acknowledged. Transformative education, the education that induces a deep change to the character or outlook of the individual, is clearly not a matter of introducing lesson plans according to their difficulty, yet it lacks any formal methodology for implementation. We can recognize transformative education is vitally important, but how to impart it?

I would claim that a catalyst exists, but remains unarticulated and unused. A student must first suffer through a painful shock induced by interaction with an external phenomenon, which like the sting of the torpedo fish, disrupts the functioning of their former explanatory schema and ultimately preps them to absorb a radical, more comprehensive framework. Contemporary Western approaches towards education take great pains to create the least frustrating, least upsetting environment as possible to maintain happy, engaged learners. While “a challenge” is certainly welcome in any curriculum, most educators would be very averse to deliberately overwhelming and frustrating their student. Yet, if my analysis of the role of disruption is accurate and if we value moments of transformative education, then I would suggest we would do well to re-examine the role of disruption and consuming states of apprehension in future thinking on education and transformative change.

3. Ibid., 144, 143 (emphasis added).
4. Literally “The object of such a satisfaction [a satisfaction that results after being judged without any interest] is called beautiful.” Immanuel Kant, *Critique of the Power of Judgment*, (Cambridge: Cambridge University Press, 2000), 5:211.
5. Ibid., §25, 5:250.
6. Ibid., §23, 5:244.
15. Ibid., 117.
16. Ibid., 121.
18. Ibid., 397.