

FACTOR

Why do certain works give us goosebumps? **Benjamin Martin** explores musical chills with the help of some snowflakes and the hand of God

“THE BODY GROWS COLD, THE EYES CLOSE, THE SENSES AND FACULTIES REMAIN WITHOUT” St. Theresa

On the ceiling of the Sistine Chapel, the hands of Michelangelo’s God and Adam almost touch, as if to show us that our highest aspirations will always be ever so slightly interrupted: the symmetry afforded through the image of God’s right hand reflected by Adam’s left is subtly disturbed reminding us that paralleling the divine remains beyond our reach. However, like St. Theresa in her *Prayer of Rapture*, the loftiest of aspirations continues – for better or worse – to define a part of us, that is perhaps reflected in a no less quasi-divine sensation.

St. Theresa’s ‘chill’ might well strike a chord with music lovers who have experienced a similarly chilly, ecstatic sensation upon listening to a work of art – and for the record, about two thirds of the population experience aesthetic chills. The technical term for this tingle up the back of the neck is *frisson* – the French word for shiver – where in physiological terms the sensitivity of skin conductance is increased as the perceiver experiences a moment of heightened, aesthetically derived intensity. Occasionally these rising shivers produce goosebumps.

IT GOES WITH THE DESCRIPTION

Such descriptions are highly interesting and informative. Yet as the American experimental psychologist William James warned over 100 years ago, the fact that certain phenomena may be excused with a medical description by no means explains away the nature of the experience itself.

James was only too aware of the power of medical descriptions, or diagnoses, which is precisely why he delivered a note of caution. He knew that any sensation, no matter how subtle in nature or abstract its derivation, is accompanied by symptoms, and that a description of symptoms alone can be used to explain away whatever less tangible factors might be involved. For example,

a diagnosis that directly associates a supposedly unfounded sensation or premonition with, say, the nerves is typically suggested in order to render irrelevant whatever deeper associations one might intuit.

This inclination of medicine, outlined by James, has only increased over the last century, leading the British neurologist Oliver Sacks to write: “There is always a certain danger that the simple art of observation may be lost, that clinical description may become perfunctory, and the richness of the human context ignored.”

Consequently it is *frisson*’s association with the simple art of observation (the notion is deceptive, however, for the art itself is never quite so simple) that I wish to explore, and in the course of taking such descriptions into account, I hope to illuminate rather than obfuscate the connotations of the experience.

A CHILL FROM THE CAVES

Recent scientific explanations concerning *frisson*, although highly informative, tend to raise more questions than they answer (a result which, despite being unintended, might ultimately be a good thing). For example, at a biological level, some scientists suggest that *frisson* may stem from our early, more hirsute ancestors, who kept themselves warm through an endothermic layer of heat beneath the hairs of their skin. This evolved, the theory goes, into our experience of goosebumps which, following a rapid change in temperature, temporarily raises and then lowers the hairs, re-establishing this layer of warmth.

Yet again, such an explanation, albeit informative on a certain level, evades the very nature of the latter-day aesthetic experience. A physiological response naturally originates from somewhere, but the question remains; why might our ancestors’ purely physical response to environmental conditions evolve into – or rather, transform into – a physiological, non-universal response (i.e. shared by two-thirds of the population) to something aesthetic in principle? Moreover, is this resultant element a mere by-product of the heat-preserving principle, or is it actually the primary factor?