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Disgust and Disease

It is possible to be interested in the same thing in different ways. These different ways may well involve different methods of enquiry and criteria of success. In the case of disgust one may be interested in it, variously, as a theme in art and literature or as a topic in developmental psychology or from an evolutionary point of view or phenomenologically or analytically or morally or sociologically or physiologically. All these ways are perfectly legitimate, but they may be largely irrelevant to each other. In my book *The Meaning of Disgust* I was primarily interested in disgust from a phenomenological and analytic point of view: I wanted to know what disgust means *to* the person who experiences it. I wanted to investigate disgust as an emotion with content, as it is experienced, as it presents itself to us as conscious subjects. I also wanted to elucidate its broad psychological significance to us as reflective beings—how it shapes our view of ourselves. In a word, I was interested in it as a *philosophical* topic.

The disease-avoidance theory is offered as an evolutionary theory: how disgust evolved and what adaptive purpose it served. It may or may not be successful as an evolutionary or functional theory. But it is hard to see how it could be a theory of the *meaning* of disgust in the sense just sketched—that is, a theory of the phenomenological content of disgust. Suppose we agree that disgust evolved so as to enable us to avoid pathogens (bacteria and viruses). Then the question is how this fact features in the content of the emotion: for we certainly do not, when we feel disgust, have thoughts *about* bacteria and viruses. Those little critters figure only de re not de dicto, as philosophers say. We had disgust reactions well before the germ theory was discovered, so this can hardly be what disgusting things mean *to* us. We have here a merely extensional coincidence not an intensional one. It may indeed be that there is an ideational content to disgust involving notions of life and death (as I and others have suggested), but the emotion does not in itself contain concepts of the actual cause of disease. That is, when we are disgusted by objects we are not consciously avoiding pathogens. We might even disbelieve in pathogens and still feel disgusted by things.

And there are other problems with the disease-avoidance theory if our concern is with the meaning of disgust. First, why is the emotion not just a type of fear, if we are motivated by a desire to avoid a dangerous object? But disgust and fear are phenomenologically quite different emotions. Second, how can the pathogen theory account for the scope of human disgust? Many objects of disgust are not carriers of disease, such as deformities, aged skin, toenails, snakes, and excess hair. Also, why are we not disgusted by hands, since they are a main vehicle of disease transmission? Why are we more disgusted by leprosy than flu, though both are contagious? Why is there an element of fascination, if not attraction ("macabre allure"), if disgust is all about disease-avoidance? Is it really plausible that in a world without disease we would feel no sense of disgust? Would feces and rotting bodies occasion no revulsion at all in such a world? Would disgust disappear if medicine banishes all disease? Why do animals and infants not experience disgust if it so vital an adaptation? Animals indeed avoid disease-carrying materials, but do they experience disgust as we do? And why does the judgment that something is a carrier of disease not always produce disgust? Why do we feel disgust at mere photographs of typical objects of disgust, when there is no chance of catching a disease from such photographs? Why do plastic feces produce disgust even when known to be fake and harmless? Germ phobia is very different from disgust, being a type of fear; but that is precisely how the pathogen-avoidance theory depicts disgust. Being a disease vector is apparently neither necessary nor sufficient for disgust, and it cannot in principle account for the intentional content of the emotion, that is, its meaning.

None of this is to deny that disease-avoidance might lie somewhere in the evolutionary history of disgust—indeed, some such theory sounds quite plausible (Darwin's original toxicity theory is a theory of roughly the same type). But that is a far cry from accepting that the theory explains the emotion of disgust, as it now exists in human beings, as a complex culturally conditioned emotion with a distinctive phenomenology and ideational content. Theories of origins are never sufficient as theories of constitution—to suppose otherwise is just the old genetic fallacy. Nor can we assume that no other factor influenced the evolution of disgust as we now experience it: disease-avoidance may have been supplemented at a later stage with something else, such as the dangers of excessive desire (as I conjecture in *The Meaning of Disgust*). A complex biological trait often has multiple origins in evolution; it is quite misleading to speak of *the* origin of a trait, as if uniqueness applies. Disease-avoidance is clearly an ancient biological necessity and it is highly likely that all sorts of accretions attach to it as it progresses to the trait of human disgust, as we know it today. These accretions no doubt explain why the scope of disgust diverges from that predicted by the simple disease-avoidance theory.

A final methodological point: Suppose a philosopher sets out to write a book on romantic love or the analysis of knowledge or the human significance of death. It would clearly be misguided to complain that this philosopher has ignored scientific work relating to the subjects mentioned. To point out, in this vein, that the philosopher had not discussed the latest scientific ideas about how romantic love or knowledge or death anxiety evolved would be to miss the point entirely. No doubt romantic love had its ultimate origins in the exigencies of gene selection and reproductive optimization, but that has little to do with the constitution of romantic love, as it exists today—especially what such love means *to* human beings. And the same is true of knowledge or death anxiety: knowledge may have had its origins in predator avoidance and thoughts of the tragedy of death must have come from the primeval need to survive, but philosophical questions about knowledge and death are not identical to questions about evolutionary origin or biological utility. They are conceptual or analytic or phenomenological questions. One can know, for instance, that knowledge is true justified belief without venturing any opinion as to how knowledge evolved long ago. As I said at the beginning, one can approach the same thing in different ways.

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Need for Empirical Recognition

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Abstract

The life-in-death theory makes empirical claims, and is therefore subject to empirical verification. Even if this theory were purely analytic or phenomenological, it would be accountable to countervailing empirical evidence. If we cannot use empirical evidence to support or refute this theory, then it cannot be compared with competing theories, which defer to observable reality.

Keywords
disgust, philosophy of science

McGinn (2015) does not simply offer a theory about the meaning and phenomenology of disgust. The life-in-death theory proposes that disgust evolved to shield our caveman ancestors from the psychological trauma of coprophagy and necrophilia, for which early humans developed a liberal appetite. This historical impetus supposedly explains the range of stimuli that repulse us today: corpses, feces, open wounds, and any object where life and death comingle. These are falsifiable, empirical claims, and they are foundational for McGinn's theory.

The observation that disgust is highly complex, elicited by many types of stimuli, and incapable of collapsing neatly within a single functional framework is a common refrain amongst disgust scholars (for various accounts see Kelly, 2011; Rozin, Haidt, & McCauley, 2010; Strohminger, 2014a, 2014b; Tybur, Lieberman, Kurzban, & DeScioli, 2013). Nonetheless, any theory would be remiss not to acknowledge, or contend with, the central role that pathogens play in disgust. McGinn disregards this evidence, arguing instead that universal disgust elicitors are unrelated to disease avoidance or physical harm. These are extraordinary claims, and they require extraordinary evidence, evidence that the author does not supply.

Disgust's phenomenology and its function are separate questions, but they are relevant to one another. For instance, the reason that fear and disgust are experienced differently has to do with the respective problems each emotion is designed to solve. We're disgusted by pathogens and not afraid of them because we don't need to flee or fight them, but avoid contact with and expel them. A bacterium does not attack us the same way as a bear. The experience of disgust—the nausea and skin crawling, the sensation of uncleanness, the urge to wash or spit out—is well suited to this goal. Any inquiry into how disgust feels is bound to be contingent upon, and tied up with, its evolutionary history and psychological mechanism.

We should be careful what we wish for. Were we to treat McGinn's theory as impervious to data, as he asserts it should be, this also renders his view irrelevant to other theories of disgust. McGinn argues that his theory is superior to all others—pathogen avoidance, taste-toxicity, animal reminder—but these are theories grounded in empirical evidence. By banishing itself to an orthogonal universe, the life-in-death theory consigns itself to a pale, limited sort of existence: untouched by the dirty hands of reality, of no consequence to those theories it wishes to consider itself superior to, and eventually forgotten.

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