

Pathologizing Ugliness: A Conceptual Analysis of the Naturalist and Normativist Claims in “Aesthetic Pathology”

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Pathologizing ugliness refers to the use of disease language and medical processes to foster and support the claim that undesirable features are pathological conditions requiring medical or surgical intervention. Primarily situated in cosmetic surgery, the practice appeals to the concept of “aesthetic pathology”, which is a medical designation for features that deviate from some designated aesthetic norms. This article offers a two-pronged conceptual analysis of aesthetic pathology. First, I argue that three sets of claims, derived from normativist and naturalistic accounts of disease, inform the framing of ugliness as a disease. These claims concern: (1) aesthetic harms, (2) aesthetic dysfunction, and (3) aesthetic deviation. Second, I introduce the notion of a hybridization loop in medicine, which merges the naturalist and normative understanding of the disease that potentially enables pathologizing practices. In the context of cosmetic surgery, the loop simultaneously promotes the framing of beauty ideals as normal biological attributes and the framing of normal appearance as an aesthetic ideal to legitimize the need for cosmetic interventions. The article thus offers an original discussion of the conceptual problems arising from a specific practice in cosmetic surgery that depicts ugliness as the disease.

KEYWORDS: *aesthetic pathology, cosmetic surgery, medicalization, philosophy of medicine, ugliness*

I. INTRODUCTION

Scholarly work in the philosophy of medicine and bioethics shows the theoretical and practical value of defining the boundaries of health and disease. Defining health concepts assists in determining the scope of medicine, identifying legitimate medical practices (e.g., mainstream versus alternative medicine), or determining the just distribution of medical care (Kingma, 2017). In various clinical practices, for example, definitions of disease guide the decision-making of clinicians, from the use of diagnostic tests to the application of appropriate medical interventions. Furthermore, a philosophical project of defining conceptual boundaries in medicine facilitates clarification of the experience of what some scholars refer to as “illness” or “sickness”, which denotes social and individual perceptions of a pathological condition (Carel and Cooper, 2014).

Defining boundaries of medical concepts remains problematic, as demonstrated by the ongoing disputes about the ways two define the disease. The current debate on the meaning of disease generally involves two competing positions referred to as naturalism and normativism, which vary depending on the view of whether health concepts are based on facts about human biology or on evaluative judgments about well-being, respectively (Ereshefsky, 2009; Kingma, 2014). Other authors defend the view that health concepts are neither wholly naturalistic nor wholly normativistic (Wakefield,

1992; Cooper, 2002). For example, Wakefield (1992) argues that disease is a combination of naturalist notions of dysfunction and normative notions of harm or deprivation.

Another challenge to the seemingly fixed notion of disease is the phenomenon of medical expansion (Carel and Cooper, 2014). Sociologists of medicine, such as Conrad (1992, 2013), refer to the notion of medicalization, which can be understood as bringing conditions previously considered non-medical within the purview of medicine. One way of medicalizing a condition is by defining it as pathological and thus requiring medical treatment.

The practice of pathologizing ugliness¹ is one example of a specific type of medicalization that blurs the boundaries of health and disease. Pathologizing ugliness refers to the use of disease language and medical processes to foster and support the claim that undesirable features are pathological conditions requiring medical or surgical intervention. Primarily situated in cosmetic surgery, the practice appeals to the concept of “aesthetic pathology”, which is a medical designation for features that deviate from some designated aesthetic norms (Dolezal, 2010).² Despite the potential conceptual challenges raised by aesthetic pathology, discussions in philosophy of medicine have largely relegated ugliness concerns outside the realm of health.

One possible reason for the neglect of analyzing ugliness is that philosophers of medicine generally regard concern with beauty to be outside the realm of health (Boorse, 1976; Hamilton, 2010; Hofmann, 2019). Some authors appear to assert that the debate is settled, describing aesthetic concerns about the body as “aspects of human life which have significant impacts upon its quality but which no sensible theory would call diseases” (Hamilton, 2010, 324). Consequently, interventions for aesthetic concerns are generally considered as enhancements and not therapy. For other authors, medical and surgical enhancements of beauty raise conceptual (and ethical) issues that are the exception rather than the rule in medicine. Boorse (2014); for example, argues that cosmetic surgery—wherein aesthetic concerns are primarily managed—remains a peripheral, albeit generally accepted, medical practice. An implication of this exceptionalist view is that conceptual problems arising from cosmetic surgery are thought to be inconsequential to general debates regarding accounts of health and disease. However, as I demonstrate in this article, the issues raised by pathologizing ugliness merit serious examination. Specifically, I offer a conceptual analysis of “aesthetic pathology”, which I argue is the central concept in cosmetic surgery’s practice of pathologizing ugliness.

The two-pronged conceptual analysis aims to capture the underlying naturalist and normative claims that underpin aesthetic pathology, as well as its significance to the conceptual boundaries of disease in general. Traditionally, normative accounts, not naturalist accounts, are subject to the charge that aesthetic concerns muddle disease definitions. In Section II, I elucidate on the passive and active manners in which the practice of pathologizing ugliness occurs in cosmetic surgery. Next, the first part of the conceptual analysis in Sections III–V describes three sets of claims that inform aesthetic pathology, namely, (1) aesthetic harms, (2) aesthetic dysfunction, and (3) aesthetic deviation, respectively. Finally, the second part of the conceptual analysis in Section VI introduces the phenomenon of the hybridization loop in medicine that offers a fertile ground for the reification of aesthetic pathology as a medical concept. The loop involves the twin processes of naturalizing aesthetic ideals and normativising statistically determined appearance norms. The loop helps to explain the ways in which aesthetic pathology complicates the distinction between the ideal and the normal, as well as the normal and the pathological.

II. THE PRACTICE OF PATHOLOGISING UGLINESS

In some ways, the pathologization of ugliness is a passive process that results from the ongoing conflation of health and beauty norms in medical specialties that manage appearance concerns (e.g., plastic surgery). In this section, I demonstrate the ways in which the conflation of looking healthy and looking beautiful inform the practice of pathologizing ugliness in the cosmetic surgery. By appealing to physical appearance as a reflection of health, there is a tendency for ideas about health and beauty to overlap. If we consider the lay interpretation that a healthy state is the absence of disease, then a healthy appearance can be understood as the absence of physical signs of disease, disorder, or deformity. There is a crude intuition that signs of disease are viewed in terms of physical flaws or imperfections, which deviate from accepted or prevalent norms of appearance, such as jaundice or

pallor. In turn, a beautiful appearance is generally associated with physical features that are thought to be signs of good health, such as glowing skin. Admittedly, there are numerous cases where a healthy—or disease-free—appearance is deemed by society as neither beautiful nor ugly. Davis (1997), for one, argues that ordinary, not necessarily beautiful, appearance can be associated with well-being. Conversely, there are cases where beauty ideals conflict with physical and mental health. For example, a wide range of research has explored thinness among women as an unhealthy beauty ideal that encourages extreme starvation, leading to both mental and physical disorders (Sengupta, 2006). Here, I focus on the cases that perpetuate the conflation of health and beauty, particularly those that take apparent signs of disease as undesirable imperfections and, in turn, beautiful appearance as devoid of signs of disease.

The notion that a healthy appearance overlaps with a beautiful one is illustrated by the way people deal with skin problems. Several studies claim that skin characteristics, such as color distribution and texture, are cues for “attractiveness, healthiness, and age” (Fink et al., 2008, 155). In particular, Fink and colleagues claim that skin color distribution which is even (that is, blemish-free) is considered healthy and beautiful, postulating that this skin characteristic can to some extent signal reproductive quality (2008, 156). The notion that “healthy skin is beautiful skin” is pervasive not only in soap commercials but also in the marketing materials of cosmetic surgery clinics (Ringel, 1998, 428). Moreover, Ringel argues that marketing strategies that depict healthy skin as beautiful tends to imply that the converse is true, that skin imperfections are viewed simultaneously in terms of “disease and ugliness” (1998, 428). Thus, visible skin characteristics are an example of a physical feature that signifies overlapping judgments regarding health and beauty.

The pathologization of ugliness becomes an active practice when cosmetic surgery explicitly reframes aesthetic concerns as a type of disease or deformity.³ In her book, *The Beauty Myth*, Naomi Wolf argues that pathological framing of aesthetic concerns legitimized the market for cosmetic “remedies” offered by surgeons (1991, 227). According to Wolf, the American dermatologist Dr. Arthur K. Balin suggested in 1978 that for marketing purposes, “it would benefit physicians to look upon ugliness not as a cosmetic issue but a disease” (1991, 227). A specific strategy in the pathologization of ugliness is to appropriate definitions from the social model of disability by framing perceived ugliness as a handicap because unattractive features are psychologically disabling, or are associated with decreased socio-economic opportunities (Elliott, 2003b; Edmonds, 2007). Such framing echoes the language of limitations that is current in definitions of disability. For example, the Disabled People’s International (DPI) defines disability as the loss or limitation of opportunities to take part in the normal life of the community on an equal level with others due to physical and social barriers (Oliver, 2017). On this account, the practice of pathologizing frames unattractive features as a form of disability. Scholars argue that the practice of treating ugliness as a disease is morally dubious, as the problem lies not with the individual but with suspect, albeit socially sanctioned, norms of beauty (Little, 1998; Elliott, 2011). Other scholars, such as Minerva (2017), assert that psychological distress and social stigma are reasonable justifications for regarding some unattractive features as pathological.

In his ethnographic study, Edmonds (2010) offers the cosmetic surgery industry in Brazil as an example of the ways in which unattractive features are pathologized. He found that local cosmetic surgeons enable the symptomization of aesthetic problems by allowing “the aged, the abandoned, the unemployed, the nonwhite, the unloved, to name their aesthetic complaint as ‘aesthetic defect’” (Edmonds, 2010, 114; emphasis in the original).

The pathologization of ugliness appears to be validated by state policies that allow government funding of cosmetic procedures. In the United Kingdom, for example, a woman can undergo government-funded breast augmentation as long as a qualified psychologist deems the surgery necessary for her well-being (Blum, 2003). In the Netherlands, various cosmetic procedures can be covered by the national health insurance based on a broad understanding of necessity (Davis, 2003). According to Kathy Davis, a sagging abdomen that makes a woman “look pregnant” qualifies as a necessary indication for abdominal surgery (“tummy tuck”) that can be covered by the national health insurance (2003, 63).

In the clinical context, the practice of pathologizing ugliness is exemplified by the term “aesthetic pathology”, a medical designation for features that deviate from some aesthetic norms (Dolezal, 2010, 368). In general, pathologization in clinical practice involves the use of disease-sounding terminology

and medical jargon to refer to undesired states. Medical jargon refers to established medical terms associated with existing pathological conditions. The use of this language fosters an image that these conditions involve impairments based on the scientific knowledge and medical expertise, and that these conditions are subject to clinical management. Aesthetic pathology, in particular, has been used by surgeons as a term distinct from functional pathology (Trenité, 2007). While the latter refers to deformities that result *in* and/or *from* physiological dysfunction (such as difficulties with vision, hearing, sight, mastication, breathing, or speech), the former refers to physical features that are free from any type of physiological dysfunction but are deemed undesirable. For example, *Mastering Revision Rhinoplasty*, a plastic surgery textbook, contains sections on surgical anatomy, aesthetics, and aesthetic pathology covering every part of the nose (Sachs, 2006). Critics claim, however, that aesthetic pathology is a medical designation based solely on social symptoms, “but which, doctors argue, causes psychological stress and distress that can be ‘cured’ through the use of cosmetic surgery ...” (Dolezal, 2010, 368). Hence, aesthetic pathology treads the line between an allegedly legitimate clinical concept that is used in the surgical practices, and a concept deemed hollow by critics.

In the following three sections, I explore the three sets of claims that underpin the practice of pathologizing ugliness embodied in the concept of aesthetic pathology, namely, normativist claims of aesthetic harm, as well as naturalist claims of aesthetic dysfunction and aesthetic deviation.

III. UGLINESS AS AESTHETIC HARM

One of the most common claims regarding the practice of pathologizing ugliness invokes normative or evaluative notions of well-being and psychosocial harm to underpin the concept of aesthetic pathology. I refer to these claims as *aesthetic harms*, which are commonly expressed in terms of psycho-social suffering or disadvantages experienced by individuals with features deemed unattractive.

Theorists such as Wakefield (1992) and Cooper (2002) begin with a naturalist notion of function or dysfunction before adding an evaluative element to their definitions of health. Wakefield’s (1992) “harmful dysfunction analysis (hda)” states that the presence of dysfunction alone is not sufficient to claim that a condition or state is a disorder (his term for disease), and that an additional value judgment about harmful effects to the individual is necessary for defining disease. For Wakefield, disease refers to dysfunctions that cause “some harm or deprivation of benefit to the person as judged by the standards of the person’s culture” (1992, 384). More recently, Wakefield (2014) claims that harm is understood as a negative impact on an individual’s life expectancy or reproductive success (which is not dissimilar to Boorse’s definition of dysfunction). Goosens (1980) and Cooper (2005) assert that the concept of harm refers to consequences that pose a threat to well-being. In her account of disease, Cooper argues that one of the criteria in defining a condition as a disease is that the condition must be “a bad thing to have” (2005, 41), which she explains in terms of being harmful to both the person and the society. She argues that harm can be based on an individual’s self-assessment, on judgments by the community, or on objective criteria determined by medical authorities. Cooper claims that pathological conditions are judged as such because they often cause pain and suffering, and are disfiguring or disabling. Some authors define harmful consequences (hence, disease-making features) of dysfunctions in terms of death, pain, disability, loss of freedom, or loss of pleasure. Assessments of the harmfulness of these consequences (i.e., disvaluations) are based to a greater or lesser extent on social considerations (Clouser, Culver, and Gert, 1997). Increasingly, such notions of harm are seeping into aesthetic evaluations of appearance in medicine.

Based on the current literature on beauty, social norms promote valuation, and pursuit of the beauty ideal by referring to phenomena such as the “halo effect” and “beauty premium”. According to the social psychologists, the halo effect of beauty is a cognitive bias that ascribes several positive behavioral and intellectual attributes to individuals who possess physical beauty (Gupta, Etcoff, and Jaeger, 2016). The halo effect echoes the old trope that what is beautiful is good and therefore holy, with the holiness often symbolized by the presence of a halo. Empirical studies show that an attractive person is assumed to be good in the sense that they are deemed more confident, more honest, and more socially skilled than a less attractive person (Gross and Crofton, 1977; Gupta, Etcoff, and Jaeger, 2016). For example, a study by Mobius and Rosenblat (2006) evaluated the tendency of employers and employees to respond to physical attractiveness in their work environment. Their findings show

that visual stereotypes (concerning attractiveness) raise both workers' and employers' productivity estimates without necessarily reflecting the actual productivity of the person deemed attractive. Based on the appearance alone, attractive workers are thought to be confident and trustworthy and more able than unattractive workers.

Several authors argue that the halo effect tends to become translated into a beauty premium, which refers to the material benefits enjoyed by physically attractive individuals. Attractive individuals have better educational outcomes, higher-status jobs, and higher wages and are more likely to marry (Benzeval, Green, and Macintyre, 2013). In Mobius and Rosenblat's (2006) study, the positive perception that attractive employees tend to be more capable than unattractive employees had an impact on the employees' salaries and opportunities for promotion. Other authors investigated the long-term impact of physical attractiveness on an individual's economic success. One study found that people assessed as more physically attractive at the age of 15 had greater socioeconomic positions at the age of 36, in the terms of their employment status, housing tenure, and income (Benzeval, Green, and Macintyre, 2013). In addition, the study showed that the beauty premium contributes to the increased wages for attractive workers.

The consequences of the halo effect and beauty premium appear to give credence to the claim that beauty impacts a person's well-being. "One would have to assume that attractive people are happier than other people. Afforded so many social and economic advantages, they must be happier," argued Gupta and colleagues (2016, 1314). The potential impact of beauty on a person's happiness helps to explain the view that beauty, like health, is a component of well-being. This is evidenced by the national surveys in the United States, which suggest that, over time, socially valued interactions arising from physical attractiveness tend to promote not only socio-economic mobility but also well-being for attractive individuals (Umberson and Hughes, 1987). Gupta and colleagues (2016) claim that based on the empirical studies, physical attractiveness is associated with a statistically significant influence on self-reported well-being and depression or distress. The researchers measured well-being based on the self-reported factors that include personal growth, self-acceptance, and positive relationships with others. These studies demonstrate that beauty confers advantages that impact a person's well-being, as well as other normativist goals such as happiness and human flourishing. Consequently, features that fall short of the beauty ideal are associated with failure to maintain well-being or achieve other normativist goals, to the extent that such features are framed as pathological.

Earlier efforts of some surgeons to pathologize ugliness in the first half of the twentieth century relied on the psychological concept of "inferiority complex" (Haiken, 1997; Elliott, 2003a; Heyes and Jones, 2009). Popularized by Austrian psychologist Alfred Adler in the 1910s, the inferiority complex was thought of as a psychopathological syndrome that allegedly involves a persistent sense of insecurity or low self-esteem (Heyes and Jones, 2009). Haiken (1997) argues that the inferiority complex provided a medical basis for surgeons to demonstrate the legitimacy of providing surgical interventions for aesthetic concerns. For example, throughout the 1930s, "prominent nasal tips", "pendulous breasts", "prominent ears", and "lines and wrinkles about the eyes, jowls and neck" were considered deformities that could cause an inferiority complex, and thus required surgery (Haiken 1997, 122). More recently, justifications for weight-loss surgery are increasingly framed in terms of relief from psychological suffering caused by being overweight. According to Schermer (2008), surgeries that relieve suffering tend to be framed as treatments rather than enhancements. In the absence of abnormalities apart from elevated body mass index, being overweight can be considered as another example of a pathologized aesthetic concern that can be modified through the bariatric surgery.

In addition, the aesthetic harms that underpin the practice of pathologizing ugliness structure psychosocial disadvantages as akin to disabilities. As I discussed in Section II, cosmetic surgeons describe ugliness in terms of disadvantages that result in decreased opportunities or limited access to socio-economic benefits (Edmonds, 2007), echoing the language of decreased opportunities and limited benefits that occurs in definitions of disability. Furthermore, the features deemed unattractive are increasingly becoming subject to modification in the same way that visible markers of disability have long been subject to medical or surgical interventions. Thus, the practice of pathologizing ugliness exploits the notion of aesthetic harm to demonstrate that unattractiveness can be classified as a disease in a normativist account of disease.

IV. UGLINESS AS AESTHETIC DYSFUNCTION

In tandem with a normativist approach described earlier, cosmetic surgery's practice of pathologizing ugliness has increasingly appealed to some naturalist components of disease. These naturalist components, albeit presented unsystematically in marketing materials and empirical studies that investigate interactions between surgeons and clients (see [Kaw, 1993](#); [Blum, 2003](#); [Edmonds, 2007, 2010](#); [Aquino, 2017](#)), appear to involve two general claims involving what can be referred to as "aesthetic dysfunction" and "aesthetic deviation". In this section, I focus on the ways in which the naturalist concept of dysfunction facilitates attempts to justify cosmetic interventions as therapeutic in nature.

Naturalist accounts of disease (and some hybrid accounts) revolve around the core concept of dysfunction, which naturalists claim is value-free. Boorse's notion of normal function appeals to conform to "species design" (1977, 555). Boorse describes species design as the typical hierarchy of interlocking functional systems that contribute to the life of organisms. In Boorse's view, the biological description of normal function simply refers to the function's contribution to the goal of biological fitness ([Ereshefsky, 2009](#)). The Boorsean understanding of function is uncontroversial in the most cases of human traits, such as in the explanation of the circulatory function of the heart. However, the biological accounts of beauty complicate matters by framing aesthetic appearance as a human trait that serves a biological function by facilitating either survival or reproduction. In turn, these accounts suggest that physical appearance that fails to facilitate survival or reproduction can be viewed as dysfunctional.

In the context of cosmetic surgery, beauty and ugliness are increasingly described in terms of aesthetic function and dysfunction akin to other biological traits. In the cosmetic surgery literature, to state the aesthetic function of a physical feature is to describe its role in presenting "a normal ... appearance", which can be interpreted as disease-free appearance ([Bluestone, 2003, 974](#)). In other cases, surgeons describe the aesthetic function of a feature by identifying its role in enhancing other parts of the body. For example, the alleged aesthetic function of the mandible is simply to define the projection of the lower third of the face ([Chim et al., 2010](#)). In another case, Sydney-based plastic surgeon Dr. Warwick Nettle claims that "... the aesthetic function of the nose is actually to enhance the eyes", and consequently noses "that are twisted or noticeably disfigured" are aesthetically dysfunctional ([Australian Cosmetic Surgery Center, 2011, 80](#)).⁴

One can concede that the definitional issue of the Boorsean function becomes muddled if we consider human beings as social animals for whom the biological goals of survival and reproduction are complex phenomena ([Kingma, 2014](#)). Unlike many other animals, survival and reproduction in the human beings cannot be reduced to simpler concepts of adaptability to environment, access to food and shelter, defense against predators, or presence of the potential mates. As social beings, human survival and reproduction are influenced by various social, economic, political, and cultural factors. For instance, achieving the goal of reproduction in human beings depends on more than having functional reproductive organs. Human reproduction largely relies on the ability of an individual to attract potential and consenting sexual partner/s—an activity that generally requires being involved in favorable social interactions.⁵ Therefore, human skills and attributes involved in social interactions can be postulated as functions or traits necessary to achieve the goal of reproduction. Admittedly, not all the types of social interactions are motivated by the goal of reproducing. However, the notion that social interaction is necessary for human reproduction implies that any human trait, such as having a beautiful appearance, might be viewed as a biological function. Ironically, the Boorsean definition of biological function as species-typical contribution to survival or reproduction thus broadens the scope of what it means for a function to be (exclusively) biological. For human beings, having an attractive physical appearance is more likely to facilitate the goal of reproduction, because that goal is socially mediated through processes that admit more rather than less attractiveness. In turn, unattractiveness can be considered an impairment in one of the functions of appearance, in that it reduces the likelihood of favorable social interaction leading to reproduction.

Moreover, several studies show that the role of attractive appearance described in human reproduction is also relevant regarding human survival ([Borah and Rankin, 2010](#)). Social interaction is a necessary component of various aforementioned socio-economic factors that play a part in an individual's survival, as demonstrated by the phenomena of beauty premium discussed earlier. Moreover,

the vagueness of the notion of “survival” implies that the Boorsean notion of goal-directedness does not effectively restrict functions to the purely biological. Goal-directedness can be used to identify aesthetic aspects of human appearance that either contribute to or impair an individual’s survival. Boorse (1977) claims that disease, as impairment of health, does not require the impairment to be fatal. Impairment only needs to make an individual marginally less likely to survive or reproduce. Even a case like vitiligo, which is a non-life-threatening dermatological condition, is considered a disease because it marginally impairs a person’s survival by increasing their chance of skin cancer. Based on the Boorse’s account, unattractiveness can be understood as appearance that impairs a person’s ability to survive or reproduce. In the same way that health depends on normal functioning that operates on average frequency and contributes to the goal of survival or reproduction, attractiveness can be described in the terms of functional contribution to the same goals. Subsequently, as, on the naturalist accounts, disease is subnormal performance of function that impairs health, it is possible to construe ugliness as subnormal performance of the function of attraction, which impairs a person’s ability to survive or procreate. The complexity of human “survival” gives room for attractiveness to be considered as a biological function. Thus, cosmetic surgery’s practice of pathologizing ugliness rehashes naturalist notions of function and dysfunction to demonstrate that unattractive features can be framed as pathological.

V. UGLINESS AS STATISTICAL AESTHETIC DEVIATION

There is a second way in which naturalist accounts are exploited in the practice of pathologizing ugliness, which is through the concept of aesthetic deviation. Boorse’s (1977) naturalist account in particular relies on the notion of normality based on the statistical frequency relative to an individual’s sex and age. For Boorse, normality is statistically derived and relies on a notion that efficient or healthy performance is that which is common or frequent. In defining health as the statistically typical performance of a function that contributes to the aforementioned biological goals, Boorse’s account relies on the notion that the function of the biological parts and process can be measured against the relevant statistical average, and thus be evaluated as healthy or not. Appeals to statistical average are fairly common for evaluation of appearance without reference to beauty or ugliness. Reconstructive surgeries of deformities caused by injuries or diseases aim to restore appearance based on statistically determined measurements of the features in question. Unsurprisingly, the same measurements are applied in the cosmetic surgeries that aim for aesthetic improvement of appearance.

In the cosmetic surgery, aesthetic deviation is commonly understood as a naturalistic, and allegedly objective, way of describing aesthetic pathology as a disease condition. This approach reduces physical unattractiveness “to measurable characteristics, such as blood pressure, weight and body mass index...” (Sailors, Teetzel, and Weaving, 2016, 62). Use of naturalistic language in describing features that deviate from accepted beauty standards provides a veneer of scientific objectivity (Merianos, Vidourek, and King, 2013). Aesthetic deviation as a naturalist dimension of aesthetic pathology is demonstrated in the quantitative descriptions of facial features that depart from ideal appearance as judged by surgeons. For example, the surgeons refer to the neo-classical facial canon as basis for the aesthetic norms that guide surgical modification of facial features (Leong and White, 2006).

The facial canon is allegedly based on the objective measurements drawn from proportions espoused by classical artistic traditions during the Italian Renaissance. In particular, surgeons allude to Leonardo da Vinci, who created standards for measuring ideal human bodily proportions in the figure of the Vitruvian man (Naini, Moss, and Gill, 2006). Da Vinci intended for such measurements to serve as guides for the artistic works, such as painting and sculpture. These measurements partly inspired the use of bodily, specifically facial, proportions outside the artistic realm in the sixteenth century practice of physiognomy that attempted to use objective measurements to define facial beauty (Ghigi, 2009). In the latter part of the eighteenth century, Swiss thinker Kaspar Lavater made further claims about the objective measurement of beauty by dividing the face into units (Ghigi, 2009). These historical examples of constructing beauty through numerical values inform cosmetic surgery’s ongoing attempts to frame unattractiveness as deviation from allegedly objective aesthetic norms.

The modern facial canon offers a specific range of numerical values when describing facial features. For example, the naso-frontal angle should be typically within 115 to 130 degrees, while the nasal width-length ratio, calculated as the alar width divided by the length of the nose, is 0.7 (Ghigi, 2009). In cosmetic surgery, these measurements are used as reference when modifying facial features. Another version of the classical facial canon is best exemplified by the “phi mask”, a diagnostic tool developed by American surgeon Dr. Stephen Marquardt as a “method for measuring facial attractiveness in an objective manner” (Bashour, 2006, 757). The phi mask allegedly reflects the golden ratio, which is the “division of a line such that the ratio of the smaller section to the larger section is the same as that of the larger section to the whole” (Rupesh et al., 2014, 22). As a diagnostic tool, Marquardt’s phi mask is superimposed over a photo of a face to “assess aesthetic problems” (Jefferson, 2004, 16). Jefferson claims that the farther the facial structures or landmarks are from the divine proportion, the more unattractive the face is. According to Rupesh and colleagues (2014), Marquardt claims that regardless of race or age, a beautiful face conforms to the proportions in his phi mask.

Several authors have criticized Marquardt’s beauty mask. Holland (2008) contends that using the golden ratio to describe beauty does not make the attempt objective. According to the author, Marquardt relies heavily on female fashion models as a reference standard of beauty. Other authors argue that the mask is oriented toward Western or Caucasian features, and the mask does not generally fit Asian features (Veerala et al., 2016; Aquino, 2017). Prendergast (2012) further argues that while golden proportion may be a recurrent theme in aesthetics, it should not be embraced as an immutable method of measuring human beauty at the expense of other factors. Despite the questionable notion that beauty can be reduced to numerical and seemingly objective values, the practice of pathologizing ugliness fuels the notion that surgeons and patients can conform to some allegedly scientific aesthetic norms.

On this account, normativist and naturalist notions of aesthetic harm, aesthetic dysfunction and aesthetic deviation underpin the practice of pathologizing ugliness in the cosmetic surgery. Next, I discuss the ways in which the practice of pathologizing ugliness further complicates the ongoing debate about accounts of disease in philosophy of medicine.

VI. HYBRIDIZATION LOOP AND AESTHETIC PATHOLOGY

In this last section, I further demonstrate the relevance of aesthetic pathology—invoked in the practice of pathologizing ugliness—to ongoing debates in philosophy of medicine. In particular, I introduce the phenomenon of *hybridization loop*⁶ in medicine (see fig. 1), which involves the twin processes of (1) naturalizing aesthetic ideals and (2) normativising statistically determined biological norms. By focusing on the practice of pathologizing ugliness, the loop offers a way of explaining the role of medicine—its practitioners and interventions—in blurring the line between naturalistic and normativistic understanding of disease and collapsing the distinction between the normal and the pathological.

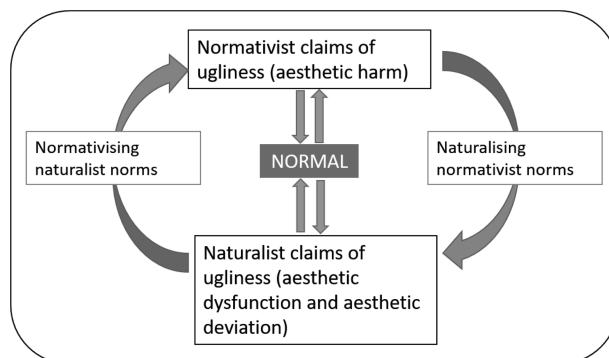


Fig. 1. The hybridization loop arises from medical and surgical interventions. The loop involves the twin processes of naturalizing normativist norms and normativisation of naturalist norms.

Before I discuss the hybridization loop, it is important to note that aesthetic pathology further complicates the already muddled distinction between cosmetic and reconstructive procedures. According to a 2017 report by the Nuffield Council on Bioethics (hereafter Nuffield), there is difficulty in drawing a sharp and consistent line between reconstructive and cosmetic procedures. The same procedure that employs the same tools and methods may be undertaken both for restorative and for the cosmetic purposes. The distinction then appears to be drawn in relation to the motivation, rather than the nature of the procedure itself (Nuffield, 2017). Currently, there are at least two ways to differentiate reconstructive from cosmetic procedures according to standard distinctions (Devereaux, 2009). One distinction lies with the type of appearance being modified. Reconstructive procedures modify pathological appearances resulting from disease, congenital deformity, or physical trauma; while cosmetic procedures modify normal, at least average-looking, features to achieve an enhanced appearance in the absence of specific disease or deformity. A second distinction refers to the type of appearance aimed for by the procedure. Reconstructive procedures tend to aim for the restoration of normal appearance, while cosmetic surgery aims for a more beautiful appearance than the patient's naturally occurring features. The practice of pathologizing ugliness makes it clear that even the relatively tenuous distinctions between cosmetic and reconstructive surgery are not going to hold up, given the hybridization loop in medicine.

One part of the hybridization loop leads to the naturalization of normativistic ideals. Naturalization in this case refers to a process of transforming socially determined aesthetic ideals into seemingly biological and statistically derived “normal” traits. In pathologizing ugliness, naturalization typically involves framing unattractive traits in terms of aesthetic dysfunction and/or the statistical deviation. Interventions that naturalize the ideal are exemplified by dental practices in the United States, where straight and pearly white teeth have become the norm. In other parts of the world, people view normal teeth as including variations in shade and alignment. In the United States, advertisements of the widely available dental treatments together with the willingness of Americans to undergo such treatments have generated the non-naturally occurring but the widespread norm of straight, white teeth (Khalid and Quiñonez, 2015). Consequently, having straight, white teeth get transformed from a normativistic aesthetic ideal into an instantiation of a statistically typical feature of normality.

Another example of this part of the hybridization loop is the popularity of facial surgeries that modify the non-Caucasian features, referred to as ethnic cosmetic surgery, in the Western countries. In the United States during the late twentieth century, facial features associated with African-Americans were subject to surgical modification as they were deemed to be deviating from the Caucasian-centric facial norms (Ghigi, 2009). More recently, Asian-Americans in the United States are choosing to undergo eye surgery to create double eyelids, a feature that is typical and naturally occurring among Caucasians (Kaw, 1993; Heyes, 2009; Aquino, 2017). Cosmetic surgeons naturalize Caucasian-centric aesthetic ideals by reducing the “cause” of the aesthetic concern from a socially determined preference into a genetically caused deformity that deviates from a statistically determined norm, given that the majority of the population in the United States is Caucasian (Kaw, 1993). Moreover, naturalization appears to be legitimized by formulating allegedly scientific measurements that establish a normal range from which ethnic features are deemed to deviate. For example, the surgical recommendations on Asian upper lid surgery state that the upper lid fold is typically located ~6.5 to 7.5 mm from the upper eyelashes in Asians versus 9 to 11 mm in Caucasians (Pai-Dei Chen and Park, 2013). Other facial features, such as the nose, jawline, and cheekbones, are similarly described in statistically derived numerical values. These examples demonstrate the ways in which medical and surgical interventions translate beauty ideals into biological norms that can be achieved through modification. Hence, medical interventions can create or perpetuate ideals of beauty that become the norm to the extent that such features appear to qualify as both statistically and functionally naturalistic in a Boorsean sense.

The other part of the hybridization loop involves medicine's tendency to idealize naturalist and biologically typical norms. In the practice of pathologizing ugliness, this process occurs when statistically typical features are idealized, in that medical and surgical interventions are offered to “correct” features that deviate from the statistical norm. While idealization of the naturalist norms may be bizarre in the context of beauty and ugliness, there are several examples in other areas of medicine. The dominant medical model, in particular, depicts bodies with visible signs of deformity and disability as lacking and in the need of repair (Garland-Thompson, 2001; Scully, 2004; McLaughlin

and Coleman-Fountain, 2014). This depiction underpins the tendency to employ surgical interventions on visible signs of deviation from accepted (and statistically determined) norms, at the times regardless of the extent of dysfunction associated with such visible deviation. For example, the typical feature of having ten fingers and ten toes is normativised when medicine determines that deviation from the standard number and configuration is a deformity subject to intervention. Polydactyly, an atypical feature that involves having a supernumerary digit in the hand or foot, is considered a deformity that can be treated by surgical excision of the extra digit (Kubat and Antičević, 2017). The example of surgical intervention for polydactyly shows the ways in which the naturalistic and typical set of fingers and toes becomes a socially normativistic ideal. On this account, medical and surgical interventions, such as the removal of a supernumerary digit, drive the slippage from the naturalistic notion of statistically normal into the normativist notion of a socially valued ideal.

The designation of aesthetic pathology similarly demonstrates the way in which cosmetic surgery concretizes fictional bodily norms. As in the most cases of pathologization, aesthetic pathology appears to command an obligation for bearers of undesirable features to seek intervention and for medical professionals to provide such intervention. Bordo (2009) argues that it is one thing to receive messages promoting aesthetic ideals from magazines and movies, but it is another to get such ideals as clinical judgments from the cosmetic surgeons. The author adds that framing ugliness as disease converts a subjective perception into a judgment mandated by medicine's expertise and professional authority. Consequently, medicine's professional authority establishes the understanding that medical procedures that modify disease-free but undesirable features are curative treatments. While the distinction of cosmetic and reconstructive surgery is tenuous, some cases remain to be generally classified under one category and not the other. To illustrate this distinction, one can compare the management of a broken jaw because of injury and a jaw deemed "too prominent". The former is considered reconstructive in that the aim is to correct a physical deformity caused by injury, while the latter is cosmetic because it aims to enhance the appearance of an unattractive feature that is free from disease or injury. However, reframing prominent jaws as an example of aesthetic pathology entails that the surgical intervention is no longer merely cosmetic but allegedly curative—and, thus, reconstructive. My conceptual analysis of aesthetic pathology shows that cosmetic surgeons appear to have moved towards eliminating any form of distinction between cosmetic and reconstructive surgery.⁷

The practice of pathologizing ugliness thus demonstrates the tendency of medical processes to involve a hybridization loop, where normative values are transformed into naturalistic norms and vice versa. The twin processes of naturalizing social ideals and normativising biological norms involved in the loop help to illustrate the role of medicine in the expansion of the boundaries of disease. First, the practice of pathologizing ugliness translates socially valued aesthetic ideals into the biological norms that can be achieved through surgical interventions. Second, the continued use of surgical interventions for undesirable features that deviate from the statistically normal appears to idealize naturalist and biologically typical norms. Consequently, the practice of pathologizing ugliness tends not only to collapse the normal and the pathological but also blur the line between naturalistic and normativistic understandings of disease.

VII. CONCLUSION

In this article, I offered a conceptual analysis of aesthetic pathology by drawing on the longstanding debates in philosophy of medicine. Aesthetic pathology illustrates cosmetic surgery's practice of explicitly reframing normal but unattractive features as a type of disease or deformity, thus warranting treatment. The first part of my two-pronged conceptual analysis described three sets of pathologizing claims that range from naturalistic to normative, namely, aesthetic harm, aesthetic dysfunction, and aesthetic deviation. The second part introduced the phenomenon of the hybridization loop, which showed that cosmetic interventions simultaneously involve naturalizing beauty ideals and normativising statistically determined norms of appearance. The loop illustrated the manners in which cosmetic surgical interventions blur the line between naturalistic and normativistic understandings of disease and facilitate the pathologization of ugliness. Traditionally, normative

accounts, not naturalist accounts, are subject to the charge that aesthetic concerns muddle disease definitions.

The narrow coverage of my conceptual exploration of aesthetic pathology invites critical analysis of the legitimacy of pathologizing ugliness. One possible position is to establish that aesthetic harm, dysfunction, or deviation (or a combination thereof) is sufficient in labeling ugliness as pathological, as Francesca [Minerva \(2017\)](#) argues. In contrast, one can revitalize the difficult distinction between cosmetic and reconstructive surgery, where appearance concerns that are free from disease or injury should be viewed as normal. A third middle-ground approach may espouse a selective pathologization, with aesthetic concerns associated with social harms being considered pathological, while those based on deviation alone remain non-pathological. In any case, further critical analysis needs to establish the extent to which aesthetic pathology can measure up to the widely regarded as objective and scientific methods that inform norms in clinical practice, such as establishing standardized diagnostic criteria, promoting evidence-based practice guidelines, and defining clear indications for treatment, among others ([Aquino, 2020](#)).

Moreover, my discussion potentially shows the value of investigating the ways in which conceptual and ethical analyses of pathologizing ugliness can inform each other. It is possible that the answer to the question of the legitimacy of aesthetic pathology is a matter of social justice rather than of conceptual boundaries of disease (see, [Little, 1998](#); [Dolezal, 2010](#)). Future research can draw on homosexuality and disability as illustrative examples of the ways in which conceptual, ethical, and socio-political factors may warrant moving certain states away from the disease model.

Finally, my conceptual analysis of aesthetic pathology invites further analysis of the broader impact of the hybridization loop on the conceptual boundaries of disease. The hybridization loop helps to illustrate the role of the medical practices in muddling our conceptions of disease by pathologizing (and proposing interventions for) any condition that departs from socially valued ideals or deviates from statistically derived normal traits. The hybridization loop is thus potentially relevant to a range of interrelated phenomena in medicine that risks expanding the boundaries of disease, including disease mongering, overdiagnosis, and overtreatment, among others. Disease mongering, for example, involves pathologization of symptoms or risk factors, or exaggerating the seriousness of mild or non-harmful conditions ([Moynihan, Heath, and Henry, 2002](#)). Common examples of disease mongering include baldness, shyness, and erectile dysfunction, as well as pre-disease states that refer to categories with abnormalities that remain below the threshold for diagnosis (e.g., pre-diabetes). The hybridization loop can help to examine the role of medicine in some varieties of disease mongering, where medical interventions and practices transform socially disvalued states, such as shyness ([Krämer et al., 2012](#)) and sadness ([Horwitz and Wakefield, 2007](#)), into seemingly naturalistic pathologies with underlying biological dysfunctions. In turn, the ensuing pathologization of such states typically involves the use of medical interventions that further reify such states as departing from both socially valued ideals and statistically determined biological norms—completing the hybridization loop discussed in pathologizing ugliness.

In conclusion, the conceptual analysis of aesthetic pathology demonstrates that cosmetic surgery's practice of pathologizing ugliness should be of interest to philosophers of medicine. Aesthetic pathology, which relies on both the naturalistic and normative claims, offers an interesting challenge to the untidy division between the naturalist and normative accounts of disease. Moreover, the hybridization loop in pathologizing ugliness offers a concrete example of the way medical and surgical interventions complicate the distinction between the ideal, the normal, and the pathological, showing the aesthetic pathology's significance to the conceptual boundaries of disease.

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NOTES

- 1 I apologize for having to use the terms “ugliness” and “ugly” in the course of this article. I admit that my use of these terms may further confer currency onto their oppressiveness. However, part of my task as a philosopher is to critically analyze these concepts, and the meanings and assumptions—including detestable ones—that they embody.
- 2 Psychological conditions with strong aesthetic fixations (e.g., imagined ugliness), such as body dysmorphic disorders (BDD), are an interesting topic of investigation but is not covered in this research. BDD is characterized by persistent and sometimes debilitating preoccupations with one’s physical appearance, which can manifest as intense dislike of a part of one’s body.
- 3 Historians of cosmetic surgery, such as Haiken (1997) and Gilman (1999), claim that pathologizing ugliness has always existed as part of the development of cosmetic surgery as a specialty that is separate from reconstructive surgery.
- 4 I briefly note here that the application of the terms “function” or “dysfunction” in aesthetic pathology appears to misrepresent the way these terms are understood in the naturalist account of disease. One can compare the manner in which function is understood in a physiological versus aesthetic sense. The physiological function of a heart to pump blood is both intuitively and logically acceptable in a medically scientific sense. In comparison, the concept of aesthetic function remains scientifically dubious since the standards of beauty that underpin definitions of aesthetic function are tenuous and arbitrary.
- 5 Assisted reproductive technology further complicates the issue because it allows artificial means of reproduction. The technology allows, for example, single women to have children, eliminating the need for sexual partners.
- 6 I am inspired by the *looping effect* from Ian Hacking’s (1995) discussion of human kinds, which resembles some of the discussion here regarding norms. According to Hacking, the looping effect results from the interplay of (scientific) facts and (social) values, whereby facts modify our values and at the same time values modify how we appreciate facts.
- 7 To further advance the legitimizing aim of pathologizing ugliness, cosmetic surgeons have started appropriating the concept of prevention for aesthetic purposes. Prevention in mainstream medicine means either averting the occurrence or slowing the progress of a disease (Starfield et al., 2008). Cosmetic surgeons in the United States currently advertise “early interventions” that improve the chances of cosmetic modifications lasting longer (Blum, 2003, 72). The surgeons claim that since younger skin is more elastic, early interventions require less extensive and less frequent surgeries than interventions performed on bodies at older ages. Blum argues that the consequence, which may be bad for the patient but good for the surgeon, is that early intervention will “require maintenance” (2003, 72). Such cosmetic procedures are now being performed in younger individuals with the aim of delaying the appearance of visible signs of aging. The example illustrates the manner by which cosmetic surgery manipulates our understanding of health and disease by appropriating established therapeutic norms, such as prevention, from mainstream medicine.

REFERENCES

- Aquino, Y. S. J. 2017. “Big eye” surgery: the ethics of medicalizing Asian features. *Theoretical Medicine and Bioethics* 38(3):213–5.
- . 2020. Is ugliness a pathology? An ethical critique of the therapeuticalization of cosmetic surgery. *Bioethics* 34(4):431–41.
- Australian Cosmetic Surgery. 2011. Creating a beautiful nose. *Australian Cosmetic Surgery Magazine*, 80–81.
- Bashour, M. 2006. An objective system for measuring facial attractiveness. *Plastic and Reconstructive Surgery* 118(3):757–74.
- Benzeval, M., M. J. Green, and S. Macintyre. 2013. Does perceived physical attractiveness in adolescence predict better socioeconomic position in adulthood? Evidence from 20 years of follow up in a population cohort study. *PLoS One* 8(5):e63975.
- Bluestone, C. D. 2003. *Pediatric Otolaryngology*, vol. 2. Philadelphia: Saunders.
- Blum, V. L. 2003. *Flesh Wounds: The Culture of Cosmetic Surgery*. Berkeley: University of California Press.
- Boorse, C. 1976. What a theory of mental health should be. *Journal for the Theory of Social Behaviour* 6(1):61–84.
- . 1977. Health as a theoretical concept. *Philosophy of Science* 44(4):542–73.
- . 2014. A second rebuttal on health. *Journal of Medicine and Philosophy* 39(6):683–724.
- Borah, G. L., and Rankin, M. K. 2010. Appearance is a function of the face. *Plastic and Reconstructive Surgery* 125(3):873–8.
- Bordo, S. 2009. Twenty years in the twilight zone. In *Cosmetic Surgery: A Feminist Primer*, eds. C. Heyes, and M. Jones, 21–34. Surrey, England: Ashgate Publishing, Limited.
- Carel, H., and R. Cooper. 2014. *Health, Illness and Disease: Philosophical Essays*. London, United Kingdom: Routledge.
- Chim, H., C. J. Salgado, S. Mardini, and Chen, H. C. 2010. Reconstruction of mandibular defects. *Seminars in Plastic Surgery* 24(2):188–97.
- Clouser, K. D., Culver, C. M., and Gert, B. 1997. Malady. In *What is Disease?* eds. J. Humber and R. Almeder, 173–217. Totowa, NJ: Springer.
- Conrad, P. 1992. Medicalization and social control. *Annual Review of Sociology* 18(1):209–32.
- . 2013. Medicalization: Changing contours, characteristics, and contexts. In *Medical Sociology on the Move*, ed. W. C. Cokerham, 195–214. New York, NY: Springer.
- Cooper, R. 2002. Disease. *Studies in History and Philosophy of Biological and Biomedical Sciences* 33(2):263–82.
- . 2005. *Classifying Madness*. Dordrecht: Springer.
- Davis, K. 1997. Cosmetic surgery as feminist utopia? *European Journal of Women’s Studies* 4(1):23–37.
- . 2003. *Dubious Equalities and Embodied Differences: Cultural Studies on Cosmetic Surgery*. Lanham, MD: Rowman & Littlefield.
- Devereaux, M. 2009. Cosmetic surgery. In *Medical Enhancement and Posthumanity*, eds. B. Gordijn, and R. Chadwick, 159–74. Dordrecht, Netherlands: Springer.
- Dolezal, L. 2010. The (in) visible body: Feminism, phenomenology, and the case of cosmetic surgery. *Hypatia* 25(2):357–75.

- Edmonds, A. 2007. "The poor have the right to be beautiful": Cosmetic surgery in neoliberal Brazil. *Journal of the Royal Anthropological Institute* 13(2):363–81.
- . 2010. *Pretty Modern: Beauty, Sex, and Plastic Surgery in Brazil*. London, United Kingdom: Duke University Press.
- Elliott, C. 2003a. *Better than Well: American Medicine Meets the American Dream*. New York: WW Norton & Company.
- . 2003b. Is ugliness a disease? *The Guardian* [On-line]. <https://www.theguardian.com/lifeandstyle/2003/aug/26/healthandwellbeing.health1> (accessed September 12, 2022).
- . 2011. Enhancement technologies and the modern self. *Journal of Medicine and Philosophy* 36(4):364–74.
- Ereshfsky, M. 2009. Defining "health" and "disease". *Studies in History and Philosophy of Biological and Biomedical Sciences* 40(3):221–7.
- Fink, B., P. J. Matts, H. Klingenberg, S. Kuntze, B. Weege, and K. Grammer. 2008. Visual attention to variation in female facial skin color distribution. *Journal of Cosmetic Dermatology* 7(2):155–61.
- Garland-Thomson, R. 2001. *Re-shaping, Re-thinking, Re-defining: Feminist Disability Studies*. Washington, DC: Center for Women Policy Studies.
- Ghigi, R. 2009. The medicalization of ugliness. *Salute E Società* EN2(2):67–77.
- Gilman, S. L. 1999. *Making the Body Beautiful: A Cultural History of Aesthetic Surgery*. Princeton, NJ: Princeton University Press.
- Goossens, W. K. 1980. Values, health, and medicine. *Philosophy of Science* 47(1):100–15.
- Gross, A. E., and C. Crofton. 1977. What is good is beautiful. *Sociometry* 40(1):85–90.
- Gupta, N. D., N. L. Etcoff, and M. M. Jaeger. 2016. Beauty in mind: The effects of physical attractiveness on psychological well-being and distress. *Journal of Happiness Studies* 17(3):1313–25.
- Hacking, I. 1995. The looping effects of human kinds. In *Causal Cognition: A Multidisciplinary Debate*, eds. D. Sperber, D. Premack, and A. J. Premack, 351–94. New York, NY: Clarendon Press.
- Haiken, E. 1997. *Venus Envy: A History of Cosmetic Surgery*. London, United Kingdom: The Johns Hopkins University Press.
- Hamilton, R. P. 2010. The concept of health: Beyond normativism and naturalism. *Journal of Evaluation in Clinical Practice* 16(2):323–9.
- Heyes, C. 2009. All cosmetic surgery is ethnic: Asian eyelids, feminist indignation, and the politics of whiteness. In *Cosmetic Surgery: A Feminist Primer*, eds. C. Heyes, and M. Jones, 191–205. Surrey, England: Ashgate Publishing, Limited.
- Heyes, C., and M. Jones. 2009. *Cosmetic Surgery: A Feminist Primer*. Surrey, England: Ashgate Publishing Limited.
- Hofmann, B. 2019. Expanding disease and undermining the ethos of medicine. *European Journal of Epidemiology* 34(7):6131–619.
- Holland, E. 2008. Marquardt's Phi mask: Pitfalls of relying on fashion models and the golden ratio to describe a beautiful face. *Aesthetic Plastic Surgery* 32(2):200–8.
- Horwitz, A. V., and J. C. Wakefield. 2007. *The Loss of Sadness*. Oxford, United Kingdom: Oxford University Press.
- Jefferson, Y. 2004. Facial beauty—establishing a universal standard. *International Journal of Orthodontics—Milwaukee* 15(1):9–26.
- Kaw, E. 1993. Medicalization of racial features: Asian-American women and cosmetic surgery. *Medical Anthropology Quarterly* 7(1):74–89.
- Khalid, A., and C. Quiñonez. 2015. Straight, white teeth as a social prerogative. *Sociology of Health & Illness* 37(5):782–96.
- Kingma, E. 2014. Naturalism about health and disease: Adding nuance for progress. *Journal of Medicine and Philosophy* 39(6):590–608.
- . 2017. Disease as scientific and as value-laden concept. In *Handbook of the Philosophy of Medicine*, eds. T. Schramme, and S. Edwards, 45–63. Dordrecht: Springer Netherlands.
- Krämer, M., W. L. Seefeldt, N. Heinrichs, B. Tuschen-Caffier, J. Schmitz, O. T. Wolf, and J. Blechert. 2012. Subjective, autonomic, and endocrine reactivity during social stress in children with social phobia. *Journal of Abnormal Child Psychology* 40(1):95–104.
- Kubat, O., and D. Antičević. 2017. Does timing of surgery influence the long-term results of foot polydactyly treatment? *Foot and Ankle Surgery* 24(4):353–8.
- Leong, S. C., and P. S. White. 2006. A comparison of aesthetic proportions between the healthy Caucasian nose and the aesthetic ideal. *Journal of Plastic, Reconstructive & Aesthetic Surgery* 59(3):248–52.
- Little, M. O. 1998. Cosmetic surgery, suspect norms, and the ethics of complicity. In *Enhancing Human Traits: Ethical and Social Implications*, ed. E. Parens, 162–76. Washington, DC: Georgetown University Press.
- McLaughlin, J., and E. Coleman-Fountain. 2014. The unfinished body: The medical and social reshaping of disabled young bodies. *Social Science & Medicine* 120(1):76–84.
- Merianos, A. L., R. A. Vidourek, and K. A. King. 2013. Medicalization of female beauty: A content analysis of cosmetic procedures. *Qualitative Report* 18(46):1–14.
- Minerva, F. 2017. The invisible discrimination before our eyes: A bioethical analysis. *Bioethics* 30(3):180–9.
- Mobius, M. M., and T. S. Rosenblat. 2006. Why beauty matters. *The American Economic Review* 96(1):222–35.
- Moynihan, R., I. Heath, and D. Henry. 2002. Selling sickness: The pharmaceutical industry and disease mongering. *BMJ* 324(7342):886–91.

- Naini, F. B., J. P. Moss, and D. S. Gill. 2006. The enigma of facial beauty: esthetics, proportions, deformity, and controversy. *American Journal of Orthodontics and Dentofacial Orthopedics* 130(3):277–82.
- Nuffield Council on Bioethics. 2017. *Cosmetic Procedures: Ethical Issues*. Nuffield Council on Bioethics [On-line]. Available: <https://www.nuffieldbioethics.org/assets/pdfs/Cosmetic-procedures-one-year-on.pdf> (accessed September 5, 2022).
- Oliver, M. 2017. Defining impairment and disability. In *Disability and Equality Law*, ed. E. F. Emens, 3–18. Abingdon, United Kingdom: Routledge.
- Pai–Dei Chen, W., and J. D. J. Park. 2013. Asian upper lid blepharoplasty: An update on indications and technique. *Facial Plastic Surgery* 29(01):026–31.
- Prendergast, P. M. 2012. Facial proportions. In *Advanced Surgical Facial Rejuvenation*, eds. A. Erian and M. A. Shiffman, 15–22. Berlin: Springer.
- Ringel, E. W. 1998. The morality of cosmetic surgery for aging. *Archives of Dermatology* 134(4):427–31.
- Rupesh, S., S. Rakesh, J. Winnier, A. Kaimal, A. John, M. Prasannan, and V. Jeyaprakash. 2014. The role of divine proportion in the perception of beauty: A cross-sectional study. *Amrita Journal of Medicine* 10(1):1–44.
- Sachs, M. E. 2006. *Mastering Revision Rhinoplasty*. New York, NY: Springer–Verlag.
- Sailors, P. R., S. Teetzel, and C. Weaving. 2016. Core workout: Afeminist critique of definitions, hyperfemininity, and the medicalization of fitness. *IJFAB: International Journal of Feminist Approaches to Bioethics* 9(2):46–66.
- Schermer, M. 2008. Genomics, obesity and enhancement: Moral issues regarding aesthetics and health. *Genomics, Society and Policy* 4(2):36.
- Scully, J. L. 2004. What is a disease?: Disease, disability and their definitions. *EMBO Reports* 5(7):650–3.
- Sengupta, R. 2006. Reading representations of Black, East Asian, and White women in magazines for adolescent girls. *Sex Roles* 54(11):799–808.
- Starfield, B., J. Hyde, J. Gervas, and I. Heath. 2008. The concept of prevention: A good idea gone astray? *Journal of Epidemiology & Community Health* 62(7):580–3.
- Trenité, G. J. N. 2007. Rhinoplasty in children. *Facial Plastic Surgery* 23(04):217.
- Umberson, D., and M. Hughes. 1987. The impact of physical attractiveness on achievement and psychological well-being. *Social Psychology Quarterly* 50(3):227–36.
- Veerala, G., C. S. Gandikota, P. K. Yadagiri, R. Manne, S. R. Juvvadi, T. Farah, S. Vattipelli, and S. Gumbelli. 2016. Marquardt's facial golden decagon mask and its fitness with South Indian facial traits. *Journal of Clinical and Diagnostic Research* 10(4):ZC49–52.
- Wakefield, J. C. 1992. The concept of mental disorder: On the boundary between biological facts and social values. *American Psychologist* 47(3):373–88.
- . 2014. The biostatistical theory versus the harmful dysfunction analysis, part 1: Is part-dysfunction a sufficient condition for medical disorder? *The Journal of Medicine and Philosophy* 39(6):648–82.
- Wolf, N. 1991. *The Beauty Myth: How Images of Beauty are Used Against Women*. New York, NY: William Morrow and Company.