

Amputees By Choice: Body Integrity Identity Disorder and the Ethics of Amputation

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ABSTRACT Should surgeons be permitted to amputate healthy limbs if patients request such operations? We argue that if such patients are experiencing significant distress as a consequence of the rare psychological disorder named *Body Integrity Identity Disorder (BIID)*, such operations might be permissible. We examine rival accounts of the origins of the desire for healthy limb amputations and argue that none are as plausible as the *BIID* hypothesis. We then turn to the moral arguments against such operations, and argue that on the evidence available, none is compelling. *BIID* sufferers meet reasonable standards for rationality and autonomy: so as long as no other effective treatment for their disorder is available, surgeons ought to be allowed to accede to their requests.

In 1997, a Scottish surgeon by the name of Robert Smith was approached by a man with an unusual request: he wanted his apparently healthy lower left leg amputated. Although details about the case are sketchy, the would-be amputee appears to have desired the amputation on the grounds that his left foot wasn't part of him — it felt alien. After consultation with psychiatrists, Smith performed the amputation. Two and a half years later, the patient reported that his life had been transformed for the better by the operation [1]. A second patient was also reported as having been satisfied with his amputation [2].

Smith was scheduled to perform further amputations of healthy limbs when the story broke in the media. Predictably, there was a public outcry, and Smith's hospital instructed him to cease performing such operations. At present, no hospital offers healthy limb amputations. Would-be amputees — or “wannabes”, as they refer to themselves — would appear to number in the thousands. They have their own websites, and are the subject of a recent documentary [3].

In this paper, we are concerned with two basic questions. First, what would motivate someone to have an apparently healthy limb amputated? Second, under what conditions is it reasonable for doctors to accede to such requests? We believe that the first question can shed significant light on the second, showing that, on the evidence available today, such amputations may be morally permissible.

What is It Like to Be a Wannabe?

What motivates someone to desire the amputation of a healthy limb? One possibility is that wannabes suffer from *Body Dysmorphic Disorder (BDD)*, a condition in which the individual believes, incorrectly, that a part of their body is diseased or exceedingly

ugly [4]. This belief can be a matter of intense concern for the individual, and is resistant to evidence against it. BDD appears to be closely akin to anorexia nervosa, in that both appear to be monothematic delusions that are sustained by misperceptions of one's own body [5]. Perhaps wannabes desire amputation in order to rid themselves of a limb that they believe to be diseased or ugly.

A second explanation is that wannabes have a sexual attraction to amputees or to being an amputee [6]. On this account, the desire for amputation would stem from apotemnophilia, which is a kind of paraphilia — a psychosexual disorder. Apotemnophiles are sexually attracted to amputees, and sexually excited by the notion that they might become amputees themselves.

A third explanation is that there is a mismatch between the wannabe's experience of their body and the actual structure of their body. On this view there is a mismatch between their body and their body as they experience it — what we might call their phenomenal (or subjective) body. On this view, which is increasingly gaining favour, wannabes suffer from Body Integrity Identity Disorder (BIID), also known as Amputee Identity Disorder (AID) [7].

The BIID account can be developed in different ways depending on the type of bodily representation that is thought to be involved. On the one hand, one could conceive of BIID in terms of a mismatch between the patient's body and their body *schema*. The body schema is a representation of one's body that is used in the automatic regulation of posture and movement [8]. It operates sub-personally and sub-consciously, guiding the parts of one's body to successful performance of action. The body schema is a dynamic structure, providing a moment-by-moment sense of how one's body parts are articulated.

Mismatches between a person's body schema and their actual body are not uncommon. Individuals who lose (or have never had) a limb often experience a phantom limb: they feel as though the limb is still there, and in some cases attempt to employ it in order to carry out actions — such as answering the telephone. Whereas the body schema of individuals with phantom limbs includes body parts that they lack, other patients have no body schema for body parts they have. Patients who have undergone deafferentation from the neck down lose any proprioceptive sense of how their limbs are currently positioned, and rely on visual cues to control action [9].

Perhaps wannabes also have a body schema that fails to incorporate the full extent of their bodies. Although we do not want to dismiss this suggestion, the evidence we have to date weighs against this account. As far as we know, wannabes do not exhibit any of the impairments in control of movement that one would expect in a person with a distorted or incomplete body schema. Further, wannabes who have had the amputation they desire seem, as far as we can tell, to be content to use a prosthesis. This suggests that the problem they suffer from is not primarily a conflict between their body and their body schema.

A more plausible possibility is that BIID involves a mismatch between the wannabe's body and their body *image*. One's body image is a consciously accessible representation of the general shape and structure of one's body. The body image is derived from a number of sources, including visual experience, proprioceptive experience, and tactile experience. It structures one's bodily sensations (aches, pains, tickles, and so on), and forms the basis of one's beliefs about oneself [10].

Discrepancies between a person's body and their body image occur in a wide range of cases, known as asomatognosias. Asomatognosia can occur as a result of the loss of

proprioception, in post-stroke neglect, and in the context of depersonalisation [11]. In many of these cases the patient in question has become delusional and denies either the existence of the affected limb or their ownership of it. In a condition known as somatoparaphrenia, patients will even ascribe ownership of their limbs to another person [12].

Other forms of asomatognosia concern only the patient's perception of their body and leave the doxastic component of their body image intact. Oliver Sacks eloquently describes his own experience of this condition:

In that instant, that very first encounter, *I knew not my leg*. It was utterly strange, not-mine, unfamiliar. I gazed upon it with absolute non-recognition [. . .] The more I gazed at that cylinder of chalk, the more alien and incomprehensible it appeared to me. I could no longer feel it as mine, as part of me. It seemed to bear no relation whatever to me. It was absolutely not-me — and yet, impossibly, it was attached to me — and even more impossibly, continuous with me [13].

Sacks did not become delusional — he knew that the leg in question was his — but he no longer experienced it as his own. Perhaps BIID involves a similar form of non-delusional somatic alienation. If so, then there might be a very real sense in which the limb in question — or at least, the neuronal representation of it — is not healthy.

It is also tempting to draw parallels between BIID and the discrepancy between body image and the person's actual body that characterizes anorexia nervosa and bulimia nervosa [14]. Of course, there are also important differences between these conditions: Whereas the person with anorexia or bulimia fails to (fully) recognize the discrepancy between her body and her body image, the wannabe is all too aware of this discrepancy.

None of the three explanations of the desire for amputation that we have outlined attempts to provide *complete* models of the phenomenon: the BDD model does not attempt to explain why wannabes might regard the limb in question as diseased or ugly; the apotemnophilia model does not attempt to explain why wannabes might be sexually attracted to a conception of themselves as amputees; and the BIID model does not attempt to explain why wannabes might fail to incorporate the limb into their body image. Clearly these models can, at best, provide only a first step in understanding why someone might become a wannabe. Nevertheless, even though these models are incomplete, we can make some progress in evaluating them.

A first point to make is that these models may not be exclusive. It could be that there are two or three bases for the desire for amputation, with some patients suffering from BDD, others suffering from a paraphilia, and others suffering from a form of BIID. Some individuals might even suffer from a combination of these disorders. Perhaps, for example, the sexual element is better conceived of as a common, though not inevitable, element of asomatognosia. Sexuality is, after all, an essential ingredient in most people's sense of identity. Elliott reports that at least one wannabe (who is also a psychologist) characterizes their desire for amputation as indissolubly a matter of sex *and* identity [15]. Like Gender Identity Disorder, BIID might be importantly sexual without ceasing to be essentially concerned with identity.

However, although each of the three models might play some role in accounting for the desire for healthy limb amputation, we can also ask which model best fits most

wannabes. The initial media stories and a subsequent BBC documentary, *Complete Obsession*, identified Robert Smith's patients as suffering from BDD. However, there seems good reason to doubt whether any of these individuals suffered from BDD, strictly speaking. Neither of the two individuals featured in *Complete Obsession* appears to find their limbs diseased or ugly. Instead, they feel in some way alienated from them. Further evidence against the BDD hypothesis is provided by recent research by Michael First [16]. First conducted in-depth anonymous interviews with 52 wannabes, nine of whom had either amputated one of their limbs themselves or had enlisted a surgeon to amputate it. Only one of the 52 individuals interviewed cited the ugliness of the limb as a reason for wanting the amputation.

What about the suggestion that the desire for amputation stems from apotemphilia? First's study provides limited grounds for thinking that the desire for amputation might have a sexual basis in some cases. 15% ($n = 8$) of First's interviewees cited feelings of sexual arousal as their primary reason for desiring amputation, and 52% cited it as their secondary reason. Further, 87% of his subjects reported being sexually attracted to amputees. Additional support for the apotemenophilia hypothesis stems from the fact that there is a large overlap between the classes of devotees (acrotomophiles: people sexually attracted to amputees), pretenders (people who consciously fake a disability) and wannabes. More than 50% of devotees are also pretenders and wannabes, suggesting a common cause for all three syndromes [17]. Because of this overlap, the data researchers have gathered on devotees may be relevant to the desire for amputation.

Devotees are apparently more sexually attracted to the *idea* of amputation than to amputees themselves. Though many have had sexual relations with amputees, few go on to establish long-term relationships with particular individuals. As Riddle puts it, for the acrotomophile, 'No amputee is the right amputee' [18]. Bruno suggests that this fact is evidence that acrotomophilia essentially involves projection: the wannabe imagines themselves in place of the amputee. Acrotomophilia is apotemnophilia displaced, projected onto others. If apotemnophilia is essentially a body integrity disorder, Bruno seems to think, it could not be displaced so easily. But it seems just as plausible to interpret the acrotomophile's lack of interest in the individual amputee as evidence that it is a concern with his *own* body that motivates the devotee.

In any case, although First's study provides some support for thinking that the desire for amputation can have a sexual component in some instances, it offers little support for the paraphilia hypothesis as the best explanation of the disorder. After all, only 15% of wannabes identified sexual arousal as the primary motivation for amputation: this leaves 85% unaccounted for.

First's data provides equivocal support for the third model, on which the desire for amputation derives from the experience of a gulf between one's actual body and one's subjective or lived body. The leading primary reason First's subjects gave for wanting an amputation was to restore them to their true identity (63%, $n = 33$). Participants said such things as, "I feel like an amputee with natural prostheses — they're my legs, but I want to get rid of them — they don't fit my body image", and, "I felt like I was in the wrong body; that I am only complete with both my arm and leg off on the right side." First suggests that this data supports the view that most wannabes suffer from BIID, which he considers akin to Gender Identity Disorder.

There is reason for caution here. For one thing, only 37% ($n = 19$) of First's participants said that the limb in question felt different in some way, and only 13% ($n = 7$) said that the limb felt like it was not their own. In addition, we know of no evidence that wannabes suffer from the kinds of sensory and attentional impairments — such as neglect — that tend to accompany, and perhaps underlie, standard forms of asomatognosia.

Perhaps the notion of body image that First's subjects have in mind is closer to that of the self-image of the person who wants cosmetic surgery, say, for breast enlargement. She knows that she has small breasts, but her idealised image of herself is of someone with large breasts. She does not feel comfortable — at home — in her own body.

Although more research needs to be done about the nature and aetiology of the desire for amputation of a healthy limb, the foregoing suffices to put us in a position to make an initial foray into the ethical issues raised by such requests. We turn now to an examination of three arguments in favour of performing the requested amputations.

Harm Minimization

The first and perhaps weakest of the three arguments is familiar from other contexts. Whether wannabes are correct in thinking that their disorder requires surgery or not, we must recognize that a significant proportion of them will persist in their desire for amputation, even in the face of repeated refusals, and will go on to take matters into their own hands. The Internet sites run by wannabes often discuss relatively painless and safe ways of amputating limbs, or damaging them sufficiently to ensure that surgeons have no choice but to amputate. Six of the 52 participants in First's study had amputated a limb themselves, utilizing dangerous means including a shotgun, a chainsaw and a wood chipper. Other patients have turned to incompetent surgeons after competent doctors refused to treat them. In 1998 a seventy-nine year old man died of gangrene after paying \$10,000 for a black-market amputation [19].

Given that many patients will go ahead with amputations in any case, and risk extensive injury or death in doing so, it might be argued that surgeons should accede to the requests, at least of those patients who they (or a competent authority) judge are likely to take matters into their own hands. At least so long as no other treatments are available, surgery might be the least of all evils. This raises familiar practical and ethical issues to do with participation in a practice of which we might disapprove and our inability to confidently distinguish those patients for whom the desire for an amputation might be transient from those who will persist in their demand. Because these issues are familiar and have been extensively treated elsewhere, we will not dwell on them here.

Autonomy

It is well-entrenched maxim of medical ethics that informed, autonomous desires ought to be given serious weight. An individual's conception of his or her good should be respected in medical decision-making contexts. Where a wannabe has a

long-standing and informed request for amputation, it therefore seems permissible for a surgeon to act on this request.

As an analogy, consider the refusal of life-saving treatment on religious grounds. Although such decisions might result in the death of the patient, they are accorded significant weight in the context of medical decision-making. If we ignore the informed and repeated wishes of the Jehovah's Witness who refuses the blood-transfusion needed to save her life, we fail to respect her as an autonomous moral agent who is living her life according to her conception of the good. If it is permissible (or even obligatory) to respect informed and autonomous rejections of life saving treatment, it is also permissible to act on informed and autonomous requests for the amputation of a healthy limb.

Of course, the parallel between the Jehovah's Witness who refuses life-saving treatment and the wannabe who requests the amputation of a limb is not exact: the first case involves an omission but the second case involves an action. This is a difference, but whether or not it is morally relevant depends on what one makes of the act/omission distinction. We are doubtful that the distinction can do much moral work in this context, but to make the case for this position would take us too far away from our present concerns.

We shall consider two objections to the argument from autonomy. The first is that wannabes are not fully rational, and that therefore their requests should not be regarded as autonomous. As Arthur Caplan put it: 'It's absolute, utter lunacy to go along with a request to maim somebody', because there is a real question whether sufferers 'are competent to make a decision when they're running around saying, "Chop my leg off"' [20].

It is clear that some individuals who might request the amputation of healthy limbs are not rational. Neither the schizophrenic patient who believes that God is telling her to amputate her leg, nor the patient with somatoparaphrenia who attempts to throw his leg out of bed because he thinks it is not his own, is rational. To what extent wannabes are also incompetent depends on what kinds of wannabes they are.

There is a *prima facie* case to be made for thinking that wannabes suffering from BDD are not competent to request surgery. There are grounds for regarding BDD as a monothematic delusion, akin to, say, Capgras' delusion (the delusion that a close relative has been replaced by an impostor) or Cotard's delusion (the delusion that one is dead). After all, individuals with BDD appear to satisfy the DSM definition of a delusion: they have beliefs that are firmly sustained despite what almost everyone else believes and despite incontrovertible and obvious proof or evidence to the contrary [21].

Of course, the circumscribed and monothematic nature of this delusion problematizes the charge of incompetence. These patients are not globally irrational. One might argue that despite the fact that their beliefs about the affected limb have been arrived at irrationally, their deliberations concerning what to do in the light of these beliefs are rational, and hence ought to be respected. One might draw a parallel between the position of the person who requests amputation as a result of BDD and the person who refuses life-saving treatment on the grounds of strange religious beliefs. One might argue that in both cases the agent has arrived at their beliefs irrationally, but they may have chosen a reasonable course of action given their beliefs. And — so the argument continues — one might argue that competence is undermined only by unreasonable practical reasoning, not by impaired belief-fixation or theoretical reasoning.

There is obviously much more that could be said about whether or not individuals with BDD are competent to request surgery, but we will not pursue these issues, for — as we have already pointed out — First's data suggest that few wannabes are motivated by the belief that their healthy limb is diseased or exceedingly ugly. Instead, most wannabes appear to have some form of BIID: they appear to be motivated to achieve a fit between their body and their body image. Are wannabes with BIID delusional?

We have already suggested that they are not. Although wannabes seem not to experience parts of their body as their own, they do not go on to form the corresponding belief that it is alien. The wannabe with BIID clearly recognizes that the leg is hers: she does not identify it as someone else's leg, nor does she attempt to throw it out of bed, in the way that patients with somatoparaphrenia sometimes do.

One might argue that the wannabe's response to her somatic alienation demonstrates a form of irrationality. One might think that the rational response to a conflict between one's subjective experience of embodiment and one's body would be to change one's experience of embodiment rather than change the structure of one's body. The claim is correct but irrelevant: the wannabe's desire for amputation appears to be born out of an inability to change the way in which she experiences her body. Of course, it may be that some wannabes would rather change their actual body to fit their experienced body than vice-versa. Is someone with such a desire set competent to make a request for amputation? They certainly challenge our notions of autonomy and competency, but it is far from obvious that they ought to be regarded as incompetent. It is important to bear in mind that they have spent many years — perhaps even decades — with a non-standard sense of embodiment. (Most wannabes report having had a feeling of somatic alienation since childhood.) Their experience of themselves has been built around this sense, and to require them to change it is, to some extent, to require them to change who they are. The case is not dissimilar to a situation in which an elderly person, blind from an early age, is suddenly presented with the opportunity to regain her sight. The decision to decline such an offer can be understood as an exercise of rational agency.

A useful angle on the question of whether the requests of wannabes could be competent is provided by contrasting wannabes with people who desire cosmetic surgery (where the surgery is not for the treatment of disfigurement). While one can certainly argue on feminist grounds that such people are not fully competent, these arguments have left many people unmoved [22]. We allow individuals to mould their body to an idealized body type, even when we recognize that this body image has been formed under the pressure of non-rational considerations, such as advertising, gender-norms, and the like. If this holds for the individual seeking cosmetic surgery, what reason is there to resist a parallel line of argument for those seeking amputation? Of course, the latter individual is seeking to mould their body to an ideal that few of us aspire to, and one that has been formed under conditions that are far from perfect, but why should these facts cut any moral ice? In fact, one might think that the desire for cosmetic surgery (and gender-reassignment surgery) is *more* problematic than the desire for amputation. Men who believe that they are really women 'trapped in a man's body' — and the overwhelming majority of transsexuals are male-to-female — typically reinforce a stereotyped view of femininity, and contribute, however unwittingly and obliquely, to gender inequality [23]. The essential woman they seek to be is weak and helpless, obsessed by appearance, and so on [24]. There are related feminist grounds (and not

only feminist grounds) on which to criticize cosmetic surgery: it reinforces a very unfortunate emphasis on appearance over substance. It is hard to see that the desire for amputation could be criticized upon grounds of these kinds, since it goes against the grain of our culturally endorsed ideals of the body.

A second objection to the argument from autonomy is that the wannabe is not in a position to give informed consent to the surgery, for he or she does not — and cannot — know what it is like to be an amputee without first becoming an amputee.

We think that this objection is weak. First, it is not at all obvious that the wannabe cannot know what it will be like to be an amputee without becoming an amputee. Arguably, there is a sense in which the wannabe *already* knows that it is like to be an amputee. We might also note that at least some wannabes pretend to be amputees — they spend their weekends in a wheelchair, and so on. To some degree, it seems that a wannabe can know what it is like to be an amputee.

But a more important point to be made here is that the objection appears to set the bar for autonomy too high [25]. Autonomy demands only that one have an adequate understanding of the likely consequences of an action, and one can have a reasonable understanding of what life as an amputee would be like without first becoming an amputee. Arguably, the wannabe is in a better position to appreciate the consequences of the desired surgery than is the person who seeks cosmetic surgery, the would-be surrogate mother, or the person desiring gender reassignment surgery.

Therapy

A third argument in favour of operating appeals to the therapeutic effects promised by such operations. The argument rests on four premises: (i) wannabes endure serious suffering as a result of their condition; (ii) amputation will — or is likely to — secure relief from this suffering; (iii) this relief cannot be secured by less drastic means; (iv) securing relief from this suffering is worth the cost of amputation. This argument parallels the justification for conventional amputations.

There is some reason to endorse (i). First, the lengths to which wannabes go in an effort to amputate their own limbs suggest that their desires are strong and unrelenting. Even when wannabes do not take active steps to secure an amputation, their feeling of bodily alienation seems to cause severe disruption to their everyday lives. 44% of First's subjects reported that their desire interfered with social functioning, occupational functioning, or leisure activities.

Some writers suggest that (ii) is problematic. Bruno and Riddle claim that the desire for amputation has its origins in attention-seeking sparked by the deprivation of parental love [26]. On this hypothesis, though it is *possible* that satisfying their wish for an amputation might give the wannabe the attention and kindness they seek, it is unlikely. Though amputees are treated with a certain degree of solicitude in many situations, the daily frustrations and difficulties caused by their condition almost certainly more than overbalance this care. Moreover, it is quite likely that the wannabe will not be satisfied with the solicitude of strangers. Instead she will seek ongoing commitment from particular individuals, and there is little reason to think that she is more likely to get this than are non-amputees. Finally, it might be that even the love of particular others will not suffice: it may be that literally nothing can stand in for the love of which she was

deprived as a child. Bruno suggests that psychotherapy is the appropriate response to the disorder, not surgery. The patient needs to develop insight into the real source of her problems before she can solve them.

Bruno's proposal is empirically testable: we can evaluate whether the desire for amputation responds to psychotherapy, and whether amputation simply leads to the displacement of the patient's symptoms. What little data we have to date suggests that Bruno is wrong on both counts. We know of no systematic study of the effects of psychotherapy on the desire for amputation, but First's study suggests that it is not particularly effective. Of the 52 individuals he interviewed, 18 had told their psychotherapist about their desire for amputation, and none reported a reduction in the intensity of the desire following psychotherapy.

On the other hand, on the scant evidence available, wannabes who succeed in procuring an amputation seem to experience a significant and lasting increase in well-being. Both of Robert Smith's patients were reported as having been very happy with their operations, and the nine subjects in First's study who had had an amputation also expressed satisfaction with the results [27]. As far as we can tell, such individuals do not develop the desire for additional amputations (in contrast to individuals who have had cosmetic surgery). Nor, as far as we know, do such patients develop (unwanted) phantom limbs. Of course, it may be that the sample to which researchers have had access is self-selecting: adherents of the BIID account are motivated to come forward to adduce evidence in favour of their theory, while those who have had more unhappy experiences simply lose interest in the debate, or are too depressed to motivate themselves to take any further part. In any case, the sample sizes are too small to be statistically significant. Unfortunately, it is hard to see how it will be possible to collect sufficient data of the required sort. We can of course follow the fortunes of those who have arranged non-medical amputations for themselves, but a controlled study would presumably require medical amputations, and ethical approval for performing such operations is unlikely to be forthcoming without this very data [28].

We turn now to (iii): can the wannabe secure relief from their suffering by less drastic means than amputation? Again, the jury is out on this. First's study suggests that psychotherapy is not a particularly effective form of treatment, but psychotherapy is not the only alternative to amputation. Some form of cognitive behavioural therapy might prove effective, perhaps in combination with psychotropic drugs. But it might also be that some wannabes cannot be helped by available drugs or talking therapy whatever the aetiology of the disorder. After all, the phantom limb phenomenon is resistant to these forms of treatment. For at least some patients, there may be no treatment available other than amputation.

Finally, we turn to (iv): is securing relief from this suffering worth the cost of amputation? This, of course, will depend on the degree of suffering in question and the costs of amputation. We have already noted that there is reason to think that wannabes often experience significant misery from their condition. But what should we say about the costs of amputation? These, of course, will vary from case to case, depending on the financial and social circumstances of the individual, and the nature of the amputation itself. The costs might be offset by the benefits of amputation in some cases but not in others. It is interesting to note that of the two would-be amputees featured in the *Complete Obsession* documentary, the person seeking amputation of a single leg was given psychiatric approval, while the person seeking to have both her legs amputated

was denied psychiatric approval. And of course the costs are not always borne just by the patient; they are often also borne by the patient's family and by society as a whole.

There is ample room here for false consciousness. On the one hand, one can argue that wannabes have an overly rosy image of what life as an amputee involves. And certainly those wannabes who have become amputees have a motivation for thinking that their life is better than it really is. On the other hand, one could also argue that those of us who are able bodied have an overly pessimistic image of the lives of the disabled. As able-bodied individuals, we might be tempted to dwell on the harm that accompanies amputation and minimize what is gained by way of identification. Perhaps we are tempted to think that the effects of the surgery are worse than they are.

Repugnance

We believe that the arguments canvassed above establish a *prima facie* case for thinking that wannabes should have access to amputation, at least in those instances in which they suffer from BIID. However, we recognize that many people will continue to find the idea of voluntary amputation of a healthy limb objectionable, even when they acknowledge the force of these arguments. What motivates such reactions?

We suspect that much of this hostility derives from the sense of repugnance that is evoked by the idea that a person might wish to rid themselves of an apparently healthy limb. Dennis Canavan, the Scottish member of parliament who campaigned to prevent Robert Smith from carrying out such operations was quoted as saying: "The whole thing is repugnant and legislation needs to be brought in now to outlaw this" [29]. Mr Canavan is surely not alone in having such a reaction. Wannabes evoke an affective response not dissimilar to that evoked by the prospect of kidney sales, bestiality, or various forms of genetic engineering. Even when a limb is severely diseased and must be removed in order to save the patient's life, the thought of amputation strikes many as distasteful at best.

Although they should not be dismissed, we think that such responses should be treated with a great deal of caution. A large number of morally benign practices — such as masturbation, inter-racial marriage, burial (and cremation) of the dead, organ selling, artificial insemination, tattooing and body piercing — have the ability to elicit disgust responses. Disgust responses can alert us to the possibility that the practices in question *might* be morally problematic, but they do not seem to be reliable indicators of moral transgression [30].

Indirect Effects

We have explored three arguments for allowing self-demand amputation of healthy limbs: the argument from harm minimization, the autonomy argument and the therapeutic argument. We have suggested that these arguments have some force. But even if we are right about that, it does not follow that we ought to allow self-demand amputation of healthy limbs. One might hold that although these arguments are strong, their force is outweighed by reasons for not allowing such surgery.

In our view, the strongest such argument concerns the possible effects of legitimising BIID as a disorder. The worry is that giving official sanction to a diagnosis of BIID makes it available as a possible identity for people. To use Ian Hacking's term, psychiatric categories have a "looping" effect: once in play, people use them to construct their identities, and this in turn reinforces their reality as medical conditions [31]. Arguably, something like this has occurred in the case of Dissociative Identity Disorder (formerly multiple personality disorder): the explosion of diagnoses of DID might be due in part to the fact that people regard DID as a culturally sanctioned disorder. The very awareness of a disorder can contribute to its proliferation.

Could a similar effect occur for BIID? Is it likely that the inclusion of the disorder in the forthcoming DSM-V will generate an explosion of cases on the order of that seen in the study of dissociation? Perhaps, but there is reason to think that such fears are unwarranted. The desire for amputation of a healthy limb is at odds with current conceptions of the ideal body image. The preference for bodily integrity is deep-seated in normal human beings, and advertising does much to reinforce such norms. We therefore think it unlikely that the desire for amputation will proliferate.

Conclusion

In a world in which many are born without limbs, or lose their limbs to poisons, landmines, and other acts of man and God, it might seem obscene to legitimise the desire for the amputation of healthy limbs. But we have argued that, in the case of at least some wannabes, the limb in question is not as healthy as it might appear: in an important sense, a limb that is not experienced as one's own is not in fact one's own. Disorders of depersonalisation are invisible to the outside world: they are not observable from the third-person perspective in the way that most other disorders are. But the fact that they are inaccessible should not lead us to dismiss the suffering they might cause. Whether amputation is an appropriate response to this suffering is a difficult question, but we believe that in some cases it might be [32].

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