Chapter 2
Normal Life: Liberal Eugenics, Value Pluralism and Normalisation

We no longer ask, in all seriousness, what is human nature? Instead we talk about normal people.[1]

2.1 Introduction

The development of technologies such as preimplantation genetic diagnosis, reproductive cloning, and genetic therapy and enhancement have prompted considerable public and scholarly concern about a return to the eugenic projects of the early twentieth century. But while there has been much disagreement on whether new genetic technologies are eugenic or not, with the implication being that their moral acceptability rests on this designation, some contributors to this debate have taken a different approach. They argue that while new genetic technologies may well be eugenic, they constitute a new form of 'liberal' or 'laissez faire' eugenics, which are morally distinct from the totalitarian eugenics of the twentieth century. The core idea driving the formulation of this notion is that even if genetic practices are considered eugenic, this is not necessarily an indication that they are morally indefensible, since a certain form of eugenic intervention may be compatible with the key moral principles of liberal democratic societies. In apparent opposition to the more familiar form of eugenics, it is argued that this form of eugenic intervention extends individual freedom in reproductive choices and insists upon state neutrality and value pluralism.

Preserving value pluralism is therefore central to maintaining the liberality of liberal eugenics over and against the older, indefensible, counterpart of totalitarian eugenics. One of the concerns that arises in relation to this is what role the idea of the 'normal' person should play in debates about genetic interventions. The point of contention is whether the standard of normality provides a way of dissecting morally acceptable and unacceptable practices in a way that maintains liberal

[1] Hacking, Ian. 1990. *The taming of chance*. Cambridge: Cambridge University Press, 161.

C. Mills, *Futures of Reproduction*, International Library of Ethics, Law, and the New Medicine 49, DOI 10.1007/978-94-007-1427-4_2,

value pluralism without ceding to relativistic libertarianism. But the concept of the normal is slippery, and the relationship between notions of biological normality and normative judgements is far from clear. To tease out some of this complexity, in this chapter I consider various approaches to the question of whether the standard of normality can ground ethical limitations on the use of genetic technologies within bioethical debates about liberal eugenics. Through the lens of the controversy over the distinction, or lack thereof, between therapy and enhancement, I briefly consider three different approaches to human nature and normality. I argue that the interaction between social and biological norms is inadequately theorised within these debates, especially since there is little recognition of the operation of social norms in shaping reproductive choices. Consequently, commentators on liberal eugenics often fail to take account of the ways in which genetic interventions can be mobilised in the interests of population normalisation, even when they are directed toward individuals rather than populations.

In the second section of the chapter, I argue that the work of Michel Foucault provides important insights into the 'normalisation of life processes'[2] at stake in this debate. I show that viewed from the perspective of biopower and normalisation, the claim to state neutrality and value pluralism is not as easily made in relation to individual wellbeing as advocates of liberal eugenics suppose. Having pointed out the value of this perspective though, I will also argue against some Foucauldian critiques of genetic technologies that emphasise their eugenic and 'normalising' possibilities at the expense of their potential benefits. I point out that the 'normalisation critique' also fails to adequately address the question of the interaction of social and biological norms, largely due to a widespread theoretical reluctance to discuss 'the biological'. While there are undoubtedly dangers in notions of biological norms, in the third section of the chapter, I will outline a non-reductive, non-deterministic way in which the interaction of biological and social norms can be broached. Specifically, I show that Georges Canguilhem's examination of the concepts of the normal and the pathological in medicine offers important theoretical resources for addressing the labile interaction of biological and social norms.

2.2 Shaping People: Human Enhancement and Normality

If the addition of the word 'liberal' transforms a morally evil practice into a morally acceptable one as Nicholas Agar suggests, then there is considerable pressure to establish the liberality of the new eugenics.[3] In order to do this, those arguing for a liberal eugenics attempt to distinguish themselves from previous generations

[2]The phrase is Canguilhem's in, Canguilhem, Georges. 1997. On *Histoire de la folie* as an event. (trans: Hobart, Ann) In *Foucault and his interlocutors*, ed. Arnold I. Davidson, 32. Chicago, IL: Chicago University Press.

[3]Agar, Nicholas. 2004. *Liberal eugenics: In defence of human enhancement*. Oxford: Blackwell, 135. For a strong critique of Agar, see Fox, Dov. 2007. The illiberality of liberal eugenics. *Ratio* 20 March 2007, 1–25.

of eugenicists by insisting upon several important points of difference. The most central of these derive from two fundamental principles of liberalism, specifically the related tenets of value pluralism in relation to the good and the priority of individual liberty. These principles give rise to an insistence on state neutrality alongside the minimisation of state intervention in decision-making processes relating to reproduction.[4] In this view, the key moral wrong of the earlier eugenics was the coercive and highly interventionist role the state played in shaping reproductive choices of citizens.[5] The totalitarian characteristics of coercive intervention curtail individual autonomy by enforcing a particular conception of the good, and restrict freedom by narrowing the scope of choices available to prospective parents. In contrast, a liberal eugenics actually enlarges the scope of reproductive liberty by minimising state regulation and coercion of reproductive choices.

There are two aspects to this claim. First, libertarian advocates of technological enhancements emphasise the necessity of restrictions on state intervention per se, such that free or unrestricted parental choice is the final arbiter of moral acceptability. A second, more complex, idea is that the liberal state must maintain a neutral stance in relation to conceptions of the good to be sought through genetic interventions. This means that even if the state plays a regulatory function in relation to reproductive technology, it should not positively intervene to enforce a particular conception of individual wellbeing or population health since it is constrained by the liberal commitment to value pluralism. It is argued that if the state maintains neutrality in this way, then rather than reinvigorating the spectre of Nazism, the new eugenics or liberal eugenics will reinforce and enhance the freedoms associated with reproduction and parenting. It will do so by giving parents more choice in and control over the genetic profile of the child that is born to them, and by reinforcing reproductive rights, such as the right to found a family established in the United Nations Declaration of Human Rights.[6]

While this construal of state neutrality and non-intervention seems to lead away from a totalitarian eugenics and thereby helps to establish the liberality of the new eugenics, value pluralism is more complicated than this supposes. For one, Allan Buchanan and his co-authors in *From Chance to Choice* point out that it is overly simplistic to think that statism itself establishes the immorality of totalitarian eugenics: a strong interventionist state is neither essential to eugenics nor the core wrong of early eugenics.[7] Indeed, the founder of eugenics in Britain, Francis Galton,

[4] Agar, Nicholas. 1998. Liberal eugenics. *Public Affairs Quarterly* 12:137–155.

[5] See Kitcher, Philip. 1996. *The lives to come: The genetic revolution and human possibilities*. London: Penguin Press, 187–204. Also see Petersen, Alan. 2007. Is the new genetics eugenic? interpreting the past, envisioning the future. *New Formations* 60:80–81.

[6] The right to found a family is especially important in defences of reproductive cloning such as Harris, John. 2004. *On cloning*. London and New York: Routledge.

[7] Buchanan, Allen et al. 2000. *From chance to choice: Genetics and justice*. Cambridge: Cambridge University Press, 51. Also see Paul, Diane B. 1994. Is human genetics disguised eugenics? In *Genes and human self-knowledge: Historical and philosophical reflections on modern genetics*,

rejected coercive decision-making and instead favoured an educational approach predicated on informed voluntarism. Additionally, Buchanan et al. point out that the requirements of pluralism differ for the state than for parents.[8] The former requires non-interference in parental reproductive decision-making, and ensures a domain of individual liberty within which parents are free to make their own decisions about reproduction without the imposition of state sanctioned reproductive goals. However, the standards required by pluralism within parental decision-making may be better understood through the principle of harm and the notion of a 'right to an open future'.[9] Value pluralism therefore pertains not only to states, but also to the nature of the choices made by individuals.

Seen from the perspective of the necessity of maintaining value pluralism, a central issue in liberal eugenics is the (individual or collective) prerogative to shape the lives of others. The key questions are: what are the limits of state intervention, and conversely, what duties does the state have in relation to maintaining and promoting population health? What are the limits of the prerogative of parents to shape the lives of their children according to their own values? To what extent do parental decisions concerning new genetics foster or restrict the prospective freedoms and rights of their future child? That is, does parental control legitimately extend so far as to allow interventions in the genetic profile of the child born to them? Or, should it be limited to interventions for which it is possible to conceive that the future child would give consent? And if such consent is withheld, for which it is then possible for the child to reject the choices of their parents in morally significant ways? The extent to which new reproductive technologies have become controversial is indicative of the significance of these questions for the moral and ethical inflection of liberal democratic societies.

In addressing questions such as these, those in favour of liberal eugenics tend to reject two 'conventional distinctions in shaping people'.[10] The first of these is the distinction between biological and social influences on childhood development. As Agar outlines, intervention by parents upon the genetic profile of their future child differs from totalitarian eugenics in a number of ways, but is not in itself radically different from other choices and influences that parents have over the lives of their children. While intervention in the genetic profile of an embryo may well be novel, this kind of influence is not qualitatively different from the manipulation of environmental factors in order to enhance a child's natural skill, talent or ability. Thus, genetic enhancement is akin to private education, additional tutoring or experimental diets.[11] This means that certain forms of genetic intervention may be no more morally problematic than practices that are routinely accepted as part of parenting

eds. Robert F. Weir, Susan C. Lawrence, and Evan Fales, 70–73. Iowa City, IA: University of Iowa Press.

[8] Buchanan, et al. *From chance to choice*, 170–175.

[9] Ibid., 167–172. For more on the notion of a 'right to an open future', see Feinberg, Joel. 1980. The child's right to an open future. In *Whose child? Children's rights, parental authority, and state power*, eds. William Aiken and Hugh LaFollette, 124–153. Totawa, NJ: Rowman and Littlefield.

[10] Agar, Liberal eugenics, 139.

[11] Agar. Liberal eugenics, 139–140.

and may in fact, 'preserve our children's capacity to fully participate in society'.[12] By the same token, it also means that certain exercises of social control by parents over children may be as morally problematic as some genetic interventions.[13] By this light, then, the distinction between the natural and the social is morally insignificant; instead, the point of moral arbitration is simply the *degree* of control a parent may have over the 'life plan' of their child. That is, the measure of parental control is merely quantitative, not qualitative. One consequence of this construal of the social and biological is that it rejects the idea that the 'natural' has any normative force in itself; thus, recourse to the 'natural foundations' of the human being cannot ground moral opposition to genetic interventions.[14]

The second distinction that liberal eugenicists tend to reject is the oft-made moral differentiation between genetic interventions for therapeutic reasons and interventions for reasons of enhancement.[15] In broad terms, this distinction attempts to capture the intuitive difference between addressing deficiencies therapeutically to restore the human body to health on the one hand, and on the other, boosting capacities beyond what is normal. But while that intuitive distinction may seem relatively straightforward at a descriptive level, it becomes more complicated in the context of the moral permissibility or otherwise of genetic inventions. For while therapeutic practices are usually seen as uncontroversial interventions to improve the wellbeing of an individual, enhancements are often seen as a step beyond the rightful limits of human control over others. However, the problem with this characterisation lies in the fact that it proves difficult to identify and isolate therapeutic practices over and against enhancements: in short, one person's therapy is another person's enhancement and vice versa.[16]

Central to the task of disambiguating therapy and enhancement is the standard of 'the normal', whether understood as normal biological functioning or more speculatively (and controversially) as normal 'human nature'. For it is often reference to a concept of normality that allows the identification of therapeutic restoration of a biological function (to its 'normal' level), as opposed to the illegitimate enhancement of a function (that is otherwise 'normal'). But while the idea of the normal is commonplace, it is both more philosophically interesting and more complicated than its everyday usage might suggest. For the concept of the normal incorporates both descriptive and normative implications, with the consequence that it cannot be simply an objective standard from which abnormalities deviate. Thus, it is not clear how, or whether, it helps to distinguish enhancement from therapy.

Three broad types of responses to this conceptual ambiguity can be identified in debates on genetics and eugenics: (1) a restrictive approach to genetic enhancement that maintains the distinction on the basis of a moral conception of human nature;

[12] Agar, Nicholas. 2006. The debate over liberal eugenics. *Hastings Center Report* 36(2):5.

[13] Ibid.

[14] See Ibid; Agar. Liberal eugenics; Agar. *Liberal eugenics: In defence man*.

[15] Agar. Liberal eugenics, 141–142.

[16] Harris, John. 2007. *Enhancing evolution: The ethical case for making better people*. Princeton and Oxford: Princeton University Press.

(2) a moderately restrictive approach that attempts to base the distinction upon a non-moral conception of normal human functioning; and (3) those who reject the standard of normality and the correlative distinction between therapy and enhancement altogether and adopt a more laissez faire approach. I will briefly discuss each of these in turn.

Perhaps the most popularly resonant argument against dissolving the distinction between therapy and enhancement draws on the trope of 'transforming human nature', to argue that a moral conception of human nature should place limits on the technological intervention into and transformation of the human genome. In this approach, a normative conception of human nature grounds a distinction between acceptable therapeutic interventions and unacceptable enhancements. More grandly, some claim that a normative conception of human nature is required to stave off the threat to liberal democratic values that the project of a liberal eugenics is seen to augur. These arguments take several forms, including the strongly Aristotelian approach of Frances Fukuyama, who posits that a substantive idea of human nature is intrinsic to our conceptions of justice, rights and morality. More Kantian approaches move away from this teleological perspective and argue that the distinctive and essential human feature of autonomous individuality is threatened by technological instrumentalisation. Similar in ways to both these arguments, the most philosophically elaborate intervention in the 'moralisation of human nature' position has been the postmetaphysical arguments of Jürgen Habermas.

The overall thrust of Habermas' argument is that new genetic technologies transform our 'ethical self-understanding' by undermining the Aristotelian distinction between the 'given' and the 'made', which he sees as having a constitutive effect within our 'lifeworld'.[17] To the extent that this distinction underpins our ethical self-understanding and correlative moral and political principles, the 'dedifferentiation' of the given and the made threatens to undermine those principles. In particular, Habermas worries that the dedifferentiation of the given and the made introduces a novel asymmetric relation between the 'designer and the designed' that is contrary to the value of universal egalitarianism. Further, this may prevent the designed from establishing an ethically autonomous or self-defined life for themselves. Because of these worries, he argues that difficult as a distinction between therapy and enhancement may be to maintain at a conceptual level, it is nevertheless practically crucial.

Notably, Habermas' emphasis on ethical self-understanding distinguishes his position from the more straightforward Aristotelianism of Fukuyama. For Habermas, the notion of human nature has an importance within our lifeworld, but it is not tied to ontological claims about human nature per se, whether understood in the form of 'Factor X' or species-typical characteristics.[18] But, regardless of the

[17] Habermas, Jürgen. 2003. *The future of human nature*. Cambridge and Malden, MA: Polity; also see Fukuyama, Francis. 2003. *Our posthuman future: Consequences of the biotechnology revolution*. London: Profile Books. I will return to a more detailed discussion of Habermas' claims regarding ethical self-understanding in a later chapter.

[18] See Fukuyama. *Our posthuman future*, 149.

nuances of Habermas' view, or its virtues and vices, the project of developing a species ethic founded on a normative conception of human nature worries some commentators. Their concern is that if substantive content is given to a notion of human nature, then it may be mobilised as a means of political exclusion and, further, appears to contradict the central liberal virtue of value pluralism.[19] And a move away from liberal pluralism threatens to collapse the new eugenics back into the old totalitarian eugenics.[20]

A second, more moderate, position on genetic interventions including enhancements also draws on a notion of human nature, but one that is understood as non-normative, since it refers only to an empirical ideal of species-typical functioning. Developed by Christopher Boorse,[21] the notion of 'normal species functioning' has been imported into bioethics by Norman Daniels,[22] Daniel Brock,[23] and Buchanan et al.[24] Boorse proposes this notion in the context of developing a functional definition of health and disease, in which diseases are 'internal states that depress a functional ability below species-typical levels', and 'health as freedom from disease is statistical normality of function, i.e. the ability to perform all physiological functions with at least typical efficiency'.[25] Boorse's naturalistic and functional conceptions of health and disease rely upon the identification of statistically ideal characteristics of species or populations. He argues that these ideal-types are neither aesthetic nor moral, but simply non-normative descriptors of typical species characteristics, from which any and all individuals might vary in some way or another, but which provide an abstracted empirical ideal to which judgements about health and disease can refer.[26] This means that health is essentially non-evaluative: for Boorse, because it refers to an empirical ideal, the concept is value free. Further, this leads to the view that 'the normal is the natural' and disease is consequently 'foreign to the nature of the species'.[27]

Buchanan et al. take up this conception of health as a way of parsing therapy and enhancement without having to posit a substantive view of human nature. Countering the 'shadow' of eugenics, they argue that eugenics may be acceptable if it is driven by concerns with justice. This raises the significant question of the

[19] See for example, Mendieta, Eduardo. 2003. Communicative freedom and genetic engineering. *Logos* 2(1):135–138; Rabinow, Paul. 2008. *Marking time: On the anthropology of the contemporary.* Princeton, NJ: Princeton University Press, 24.

[20] Agar. Liberal eugenics, 137.

[21] See Boorse, Christopher. 1977. Health as a theoretical concept. *Philosophy of Science* 44(4): 542–573.

[22] Daniels, Norman. 1985. *Just health care*. Cambridge and New York: Cambridge University Press.

[23] Brock, Dan W. 1993. *Life and death: Philosophical essays in biomedical ethics*. Cambridge and New York: Cambridge University Press.

[24] Buchanan et al. *From chance to choice*.

[25] Boorse. Health as a theoretical concept, 542.

[26] Ibid., 557.

[27] Ibid., 554.

extent to which genetic resources allocated by the 'natural lottery' can be subjected to the requirements of distributive justice. Addressing the resulting 'colonisation of the natural by the just', they adopt the notion of 'normal species function' to differentiate between the restoration of normal functioning versus attempts to extend the capacities allocated to a person in the natural lottery beyond the statistically normal range. Within this, disease is defined as any 'adverse departures from normal species functioning',[28] and therapeutic interventions would entail re-establishing normal species functioning. Importantly, the limited defence of the therapy/enhancement distinction that they develop is not supposed to derive moral force from the empirical ideal of the normal per se (the normal is statistically descriptive, not normative), but from a broader argument for a 'social structural' conception of just health care.

That is, genetic therapies provide a means of curing or preventing disease in accordance with Rawlsian principles of justice as fairness, aimed at ensuring equality of opportunity. Hence, it is not the normal per se that acts as a 'regulative ideal', but rather, the imperative of equality of opportunity; normal species functioning is only important to the extent that it contributes to that, by allowing for fair competition in social cooperation. Normal species functioning thus provides one abstract indicator in establishing the 'level playing field' required for equality of opportunity. The implication of this is that interventions may be undertaken that help to establish that measure, particularly by eliminating disease conditions,[29] but genetic interventions should not undermine it by raising some above the bar of the normal. That said, it is worth noting that the equality of opportunity view of genetic interventions offered by Buchanan et al. does not require an absolute equality of genetic resources, since, for one, this fails to appreciate 'the limitations imposed by the fact of value pluralism'.[30] Instead, they suggest that it may aim at something akin to a 'genetic decent minimum' that promotes the prevention or amelioration of the most serious disabilities that negatively impact on an individual's equality of opportunity.[31]

In developing this view, Buchanan et al. adopt and defend the model of just health care proposed by Daniels, in which normal species functioning anchors the obligations of health care. That is, his 'normal function' model of fair equality of opportunity entails for health care the 'relatively modest and limited task of keeping people functioning as close to normal as possible', in order to preserve their 'capacity to participate in political, social and economic life'.[32] Such participation is not, however, guaranteed on the basis of being 'equal competitors' but rather, of being 'normal competitors'. Buchanan et al. thus draw on the conception of normal species functioning posed by Boorse; but they also move away from his strong claim that

[28] Buchanan et al. *From chance to choice*, 72.

[29] Though, it should be noted that acceptable interventions are not strictly limited to the treatment of disease, but may also include conditions that do not count as disease. Nevertheless, the treatment of disease conditions provides the primary rationale of just health care. See Buchanan et al. *From chance to choice*, 74.

[30] Ibid., 80. In this, it is less expansive than the 'brute luck' view. See the discussion at Ibid., 66–84.

[31] Ibid., 82.

[32] Ibid., 127, 22. Also see Daniels, Just Health Care.

this conception of health and disease is entirely non-evaluative. Instead, they concede that the social context in which adverse departures from normal functioning are manifest will impact upon their specification as disease conditions or not. Further, they note that '*sometimes* values, including prejudices, as well as errors, intrude' into the relatively 'objective and non-evaluative context provided by the biomedical sciences'.[33]

However, several difficulties can be seen in this view. For one, the conception of biomedical sciences indicated here is naïve; as science and technology scholars have shown, (biomedical) science is not a value-free activity, in which values, prejudices and errors intrude only occasionally. Instead, values are intrinsic to the practice of science in a number of ways, from the personal values of individual scientists, the social norms that shape scientific practice through funding priorities and economic and political agendas for example, and the norms that legitimate and support scientific epistemology itself.[34] More importantly for my purposes here, Buchanan et al. forget that the concept of the normal is itself a confusion of fact and value: the term 'normal' derives from the Latin term 'norma', meaning to set right or to straighten, such that the norm (understood as the typical) and the right are etymologically intertwined. As Ian Hacking pithily writes, '[f]rom the beginning of our language the word "normal" has been dancing and prancing all over' the fact/value distinction.[35] This means that a purely descriptive conception of the normal will be difficult to achieve, and it is not at all clear that Buchanan et al. do achieve such a conception.

Disability theorists point to the significant ambiguities embedded in the notion of 'normal species functioning' that underpins the aim of ensuring 'normal competitors'. For instance, Ron Amundson argues that the notion of biological normality is itself part of social prejudices against individuals with certain functional modes or styles. He draws the conclusion that disadvantages and limitations on opportunity cannot be causally linked to biological characteristics, but instead always derive from the environments in which individuals operate and live.[36] Extending on this, Shelley Tremain argues that while the notion of normal species functioning seems to imply a statistical conception of 'the typical' or most common – the statistical mode – it actually operates to indicate something more like the mean or average. Moreover, deviations from this average are negatively evaluated such that the guiding presumption is that 'the more an organism diverges from the species average, the

[33] Ibid., 122.

[34] This insight is commonplace in science and technology studies, but for especially interesting examples see Latour, Bruno. 1986. *Laboratory life: The construction of scientific facts*. 2nd edn. Princeton, NJ: Princeton University Press; Rabinow, Paul. 1999. *French DNA: Trouble in purgatory*. Chicago, IL: Chicago University Press; Fox Keller, Evelyn. 2003. *Making sense of life: Explaining biological development with models, metaphors and machines*. Cambridge, MA: Harvard University Press.

[35] Hacking. *Taming of chance*, 163.

[36] Amundson, Ron. 2000. Against normal function. *Studies in the History and Philosophy of Biology and Biomedical Sciences* 31(1):33, 51.

worse it will function'.[37] The worry underlying this critique relates to the interaction of the ostensibly biologically derived 'species-typical' norms and the 'normal' understood as a regulative ideal that is externally applied as a means of delimiting the socially accepted standards of bodily capacities. What is embedded within the critique of the mobilisation of the statistically typical as an evaluative tool is the concern that the 'normal' is no longer taken as a normatively neutral indicator but is instead conflated with a social ideal, such that the formula of 'species-typical characteristics' actually operates as a normative conception of human nature, rather than as a 'purely' statistically descriptive one.

Whether Buchanan et al. fall foul of this critique or not would be a question worth exploring in more detail, though I cannot attempt such an exploration here. The question that would have to be asked is whether the notion of statistical normality can do the work that they wish it to do without recalling the fact/value confusion that Hacking suggests is intrinsic to the concept of the normal. Does the emphasis on intervening therapeutically to ensure that an individual attains a condition akin to, or at least in the vicinity of, normal species functioning as a matter of justice mean that the normal is implicitly taken as the right or even the ideal? Does this view presuppose that being 'normal' is better than being 'abnormal', such that deviation from the normal is itself negatively evaluated? And if so, what are the implications of this for an understanding of just health care in the context of a new eugenics? Their limited defence of the therapy/enhancement distinction through the notion of normal species functioning, and elaboration of a 'normal function' model of just health care, thus raises complex questions for anyone interested in the political implications of the concept of the normal.

The primary concern of Buchanan et al. is to establish a social and political obligation to provide therapeutic measures that restore normal functioning as a matter of justice, while avoiding claims for a comparable obligation to undertake enhancements (apart from in exceptional cases). The third approach I wish to consider here takes a stronger line, to argue for an obligation to enhance. One of the key proponents of this approach is John Harris, who has recently attempted an extensive justification of human genetic enhancement. In this, he argues that references to the normal should play no role in establishing the moral permissibility of either therapy or enhancement. Harris emphasises the indistinction between therapy and enhancement, and, moreover, argues that enhancement technologies have long played a fundamental part in human life. Vaccinations, for instance, are not simply therapeutic, since they provide an ability to resist disease that humans would not otherwise have, and yet they are generally seen as not only beneficial but also morally acceptable. By extension, he also implies that all other enhancements are similarly morally acceptable. But Harris' argument is not only for the *freedom* but the *obligation* to undertake enhancements. He contends that insofar as enhancements are beneficial – which they are by definition – then individuals and governments should pursue

[37] Tremain, Shelley. 2006. Reproductive freedom, self-regulation and the government of impairment in utero. *Hypatia* 21(1):43.

them, since there is a similar obligation to confer benefit as there is to avoid harm. For him, 'the moral imperative is the safety of the people and the duty to compare risks with benefits, not on the basis of the normality of the risks or of the benefits, or of their contribution to equality of opportunity, but on the basis of their magnitude and probability'.[38] Harris' use of the principle of harm, drawn from John Stuart Mill, eschews any conception of the normal, whether understood as descriptive or normative, and instead simply emphasises the calculation of likely harms and benefits. Thus, he adopts a libertarian position in which the only potential limit on an individual's freedom to enhance is the likelihood and magnitude of harm.

However, while Harris explicitly rejects any reference to normality, it may be that he nevertheless implicitly relies upon some conception of the normal. For one, this is because the designation of interventions as beneficial or harmful seems to require some standard against which to judge whether they are in fact benefits or harms. While Harris avers that, 'normalcy plays no part in the definition of harm and therefore no part in the way the distinction between therapy and enhancement is drawn',[39] it is difficult to see that he provides a compelling alternative standard by which harms can be identified. What he does offer as a way of identifying a harmed condition is the 'emergency room' test. He elaborates the test: 'if a patient was brought unconscious into the ER department of a hospital in such a condition and it could be reversed or removed, the medical staff would be negligent if they failed to reverse or remove it'.[40] Even so, while this test suggests that the failure to reverse a condition would indicate negligence (because the condition is deemed harmful), it does not clarify why the condition is thought of as harmful in the first instance, such that the failure to reverse or remove it would be negligent.

There is, then, a significant circularity in this test – a condition is considered harmful if the failure to remove or reverse it is negligent. But that failure is only negligent because the condition is intuitively understood as harmful in the first place. This circularity appears again when Harris writes, 'a harmed condition is defined relative both to one's rational preferences and to conditions which might be described as harmful'.[41] It is surely truistic that a harmed condition refers to a condition that might be described as harmful. But even if this definition is granted, a question remains about the work that the idea of harmed conditions referring to rational preferences does for Harris. The emergency room test is, for Harris, a way of determining that disabilities are and should be treated as harmed conditions. While it might seem that the rejection of a notion of biological normality might lead Harris to an extreme position of abjuring the very idea of disability – since ostensibly he has no criteria against which to identify some bodily capacities as diminished in

[38] Harris. *Enhancing evolution*, 54.
[39] Ibid., 46
[40] Ibid., 91, 92–93.
[41] Ibid., 92.

relation to others – this is not the case. Instead, the reference to rational preferences is central to his definition of disability and provides him with that criterion.

While rejecting reference to biological functionality for defining disability, Harris does not therefore take up the opposing social model of disability either. In this model, disability is the social condition of discrimination that attaches to biological conditions of impairment. Thus, disability is to impairment what gender (understood as socially constructed) is to sex (understood as an irreducible biological substrate). But as such, the identification of impairment still seems to require reference to biological functionality. In rejecting such reference, Harris instead proposes to define disability as 'a condition that someone has a *strong rational preference not to be in* and one that is moreover in some sense a harmed condition'.[42] In this 'harmed condition' model of disability, the important point of reference for identifying disability is 'alternative possibilities' of bodily capacities, where harm is established through the above mentioned emergency room test. A bodily capacity is considered a disability if it is conceivable that someone could have a strong rational preference not to be in that condition, where that condition can in some sense fail the emergency room test such that it would be negligent to fail to remove or reverse the condition.

Apart from the fact that some disabilities are neither reversible nor removable, this construal of the emergency room test as a way of identifying harmed conditions reveals several points about it. For one, it highlights the significantly counterfactual nature of this model: that is, a given condition is identified as a disability because it is seen as undesirable or harmful in relation to a counterfactual alternative existence without the condition. Further, when this is combined with the standard of rational preferences, it becomes clear that Harris' approach to disability is, for want of a better term, 'able-centric'. That is, it is from the perspective of a rational, *able-bodied* person, and in relation to such a counterfactual alternative person, that a condition is seen as rationally desirable or not. Hence, while Harris rejects recourse to the 'subjective experience' of a disabled person as a relevant factor in reproductive ethics, he nevertheless implicitly relies on the (notional) subjective experience of an able-bodied, rational person as the measure against which disability is considered harmful. That is, he implicitly relies on a conception of a 'normal' person.

In more general terms, the problem with Harris' approach is that he fails to grasp the ways in which social norms shape the very desirability of a condition as compared with counterfactual alternatives. That is, he fails to see that what might be rationally desirable is itself normatively framed. Clearly, the sense in which I use the

[42]Ibid., 91; my emphasis. See Harris, John. 2001. One principle and three fallacies of disability studies. *Journal of Medical Ethics* 27:387. Also see the alternative formulation of this definition in Bortolotti, Lisa and John Harris. 2006. Disability, enhancement and the harm-benefit continuum. In *Freedom and responsibility in reproductive choice*, eds. J.R. Spencer and Antje Du Bois-Pedain, 32. Oxford: Hart Publishing; where it is argued that, 'conditions are disabling if they are physical or mental conditions that constitute a harm to the individual which a rational person would wish to be without' (32).

term 'normative' here does not simply refer to more or less explicit formulations of moral principles or declarations of what ought to be distinct from what is. Instead, I refer to an understanding of social life itself as fundamentally normative. One characteristic of this view is that it insists on the pervasive and ineluctable power of norms in shaping which bodies appear within the social field as desirable possibilities for living. Judith Butler poses this claim most forcefully, when she argues that the materiality of the body is fundamentally shaped by the reiteration and enactment of regulatory social norms. She writes that 'bodies only appear, only endure, only live within the productive constraints of . . . regulatory schemas'[43] such that the appearance of the body within the social sphere is simultaneous with the attribution of value or worth. For Butler, norms impose 'a grid of intelligibility' on the social and, in doing so delineate possible modes of bodily life. One consequence of this is a blurring of the distinction between the descriptive and the normative – bodies that appear within the social field embody the norms that productively constrain their own intelligibility and recognisability. Additionally, norms are embedded within the practical exercise of power across various institutions such as law and medicine, and as such, they can be mobilised – explicitly or implicitly – as standards of evaluation and exclusion.

In relation to Harris, this perspective makes it clear that his abstraction from the social operation of norms in shaping the desirability of bodily forms hides a deeper attachment to normality than he acknowledges. More generally, this perspective shines light on the constitutive effect of social norms in shaping reproductive choices and the widespread neglect of these in the liberal eugenics debate. Unfortunately, though, the evasion of questions about the ways in which social norms shape and constrain the intelligible possibilities for livable lives risks undermining the value pluralism that advocates of liberal eugenics want and need to protect. But while the productive role of social norms – and specifically the relationship of norms, power, and bodily and social life – has been obscured in the liberal eugenics debate, these concerns have been central for other scholars critical of the directions that the implementation of genetic technologies can take. In particular, the work of Michel Foucault has been used to reveal the ways that new genetic technologies are harnessed to biopolitical strategies for governing the health of individuals and ipso facto, the population. From this, it is claimed that such technologies effectively become, or risk becoming, *normalising*. Focusing on this idea, in the following section I take up questions of norms in the constitution of social and bodily life through Foucault's work and the 'normalisation critique' that has emerged in reference to it. I argue that while the normalisation critique addresses the role of social norms in shaping desirable bodily forms and reproductive choices, it fails to fully address the interaction of social and bodily norms, largely because of a reluctance to discuss 'the biological'.

[43] Butler, Judith. 1993. *Bodies that matter: On the discursive limits of 'sex'*. New York and London: Routledge, xi.

2.3 What is Normalisation?

The idea of 'normalisation' used in contemporary scholarship usually derives from Foucault's analyses of the transformations in political power and techniques of governance in the modern West (dated from the late eighteenth century). While it is not always easy to specify the precise relations between Foucault's various formulations of technologies of power as discipline, governmentality or biopower, to some extent the notion of normalisation cuts across these. The idea highlights the way in which norms are mobilised to regularise individuals in relation to each other and in reference to a standard as a means of control and political subjection. In general terms, normalisation refers to a mode or practice of power that centres on the *norm* in contrast to the rule or law. Within this, a norm is neither prohibitive nor universally applicable, but is instead a flexible, context specific principle or standard of evaluation in relation to which individual divergences can be identified, measured and corrected. As Foucault notes, the function of the norm is not to 'exclude and reject'; instead, 'it is always linked to a positive technique of intervention and transformation, to a sort of normative project'.[44] That is, the identification and measurement of divergences from the norm allows for the mobilisation of programs, techniques and practices geared toward the correction and regularisation of an individual in relation to the norm, to bring the divergent body back into coherence with the abstraction of the norm. Further, because the application of a norm allows for the identification of divergence and deviation, it gives rise to the categorisation of the 'abnormal': the abnormal individual is both the direct consequence and integral object of the power of normalisation.

Several points can be made about this characterisation of the power of normalisation. First, normalisation is directly related to the historical emergence of statistics as a means of measuring populations in the interests of governing them. As Hacking has shown in *The Taming of Chance*, the modern notion of the normal human being was given great impetus by the French statistician Adolphe Quetelet, who, in the 1830s and 1840s, applied the 'curve of error' from astronomy to biological and social phenomena to yield his idea of 'the average man' (*'l'homme moyen'*). Indicating the statistical mean of a set of attributes not of the human species, but of a nation or 'race', Quetelet introduced a new apparently objective and comparable measure of a people and in doing so, contributed to the development of eugenics.[45] But Galton, the founder of anthropometrics as well as eugenics, went further by reorienting the notion of the normal away from the statistically typical toward deviations from the mediocre middle, and especially toward ideal traits. In this, Galton reiterated the idealised conception of the normal introduced by Auguste Comte, who in turn drew upon the concept of 'normal states' developed by advocate of the

[44]Foucault, Michel. 2003. *Abnormal: Lectures at the College de France, 1974–1975*, eds. Valerio Marchetti and Antonella Salomoni (trans: Burchell, Graham), 50. New York, NY: Picador.

[45]Hacking. *Taming of chance*, 105–114. I draw extensively on Hacking's history of the concept of the normal in this paragraph. Also see Davis, Lennard. 1995. *Enforcing normalcy: Disability, deafness and the body.* London: Verso, 23–49.

organic 'physiological' theory of disease, F.-J.-V. Broussais, in the 1820s.[46] Thus, the modern usage of the word 'normal' derives from medicine, and contains within it a tension between objective measure and idealisation. Hacking writes, the normal 'stands indifferently for what is typical, the unenthusiastic objective average, but it also stands for what has been, good health, and for what shall be, our chosen destiny'.[47] It is, he suggests, precisely because of this tension that the apparently 'benign and sterile-sounding word "normal" has become one of the most powerful ideological tools in the twentieth century',[48] as it may well also prove to be for the early twenty-first century.

In light of this history of the concept of the normal, it is worth reflecting on Foucault's comment that the nineteenth century eugenics movements were linked to the rise of psychiatry, through the development of the doctrine of 'degeneration'. Through this notion, psychiatry gave rise to a new racism against the abnormal, the function of which 'is not so much the prejudice or defence of one group against another as the detection of all those within a group who may be carriers of a danger to it. It is a racism that permits the screening of every individual within a given society'[49] in the interests of population health and wellbeing. By 'racism', Foucault does not simply mean the doctrine of biologically based racial types and the hatred to which this has given rise. Rather, he uses the term in a broader sense to indicate a system or systems of detection that operate within a culture and that may or may not refer explicitly to race, but which do entail the political capture and intensification of biological difference.

To be clear, I am not suggesting that the doctrine of degeneracy has a contemporary resonance or relevance, for the language of degeneracy plays no part in defences of liberal eugenics. However, Foucault's account of normalisation as giving rise to an internal system that seeks to 'improve life by eliminating accidents, the random element, and deficiencies',[50] does have a bearing here. This is not because liberal eugenic projects for the improvement of human wellbeing by genetic means seek to undercut or eliminate individuality per se. However, to the extent that justification for eugenic genetics relies – whether implicitly or explicitly – upon a norm for individual wellbeing as a way of identifying, calibrating and correcting deviations from it, then it is normalising. This is surely evinced in the drive to take control of the 'genetic lottery' with the aim of producing 'normal competitors' in accordance with 'normal species functioning'.

Second, the primary role of norms in governing raises a question about the power of legal apparatuses, and the correlative normative function of

[46] Ibid., 160–169; 180–184.

[47] Ibid., 169.

[48] Ibid.

[49] Foucault, *Abnormal,* 317. Also see, Foucault, Michel. 2003. *Society must be defended: Lectures at the College de France, 1975–1976*, eds. Mauro Bertani and Alessandro Fontana (trans: Macey, David), 254–263. London: Allen Lane.

[50] Ibid., 248.

laws.[51] Foucault maintains in his various discussions of normalisation and the emergence of a 'normalising society' that legal apparatuses are increasingly incorporated into a continuum of institutions, the function of which are 'for the most part' regulatory and which rely upon norms in their operation. One consequence of this is that the mode by which the law increasingly operates is that of the norm. This does not mean that law itself is superseded; quite evidently, that is not accurate. Rather, Foucault argues that as a regulatory apparatus, the law continues to operate within the regime of biopower, but in a different way than it previously had. As François Ewald outlines, norms are not strictly opposed to the law, though they may be opposed to the 'juridical' code that links law to sovereignty, in which the law is necessarily 'armed with the sword'.[52] In fact, not only are norms not opposed to the law, in a normalising society they become the means by which law operates. In a biopolitical society, norms allow the law to operate in conjunction with a series of increasingly regulatory apparatuses such as medicine. In doing so, norms permit the law unprecedented access to individual bodies, allowing it to act as a continuous regulatory force rather than an occasional, prohibitive instrument of sovereign right.

One implication of the interaction of law and norms is that the emphasis on value pluralism and state neutrality is less effective in differentiating liberal eugenics from its more interventionist counterpart than is often allowed. The power of normalisation means that legal restrictions or enforcements are not specifically required for the state to intervene in shaping conceptions of the good in regard to individual and population health and reproduction. As studies of liberal governmentality have shown, the tight integration and interaction of the law and norms in modern politics means that the state can effectively 'govern at a distance' through ostensibly non-state institutions.[53] This does not mean that the doctrine of value pluralism is simply false, since it has a discursive force that is not captured within the truth-falsity opposition. But it does suggest that recourse to and the enactment of value pluralism are more complicated than has been allowed in the liberal eugenics debate.

Further, as I suggested previously, what often falls out of the liberal eugenics view is the way that individual decision-making is normatively constrained even when the shape and scope of notions of human good are not explicitly enforced by the state. Foucault's account of the operation of norms in a biopolitical society brings into relief the condition of living in a normative universe, in which norms

[51] Also see Waldschmidt, Anne. 2005. Who is normal? Who is deviant? 'Normality' and 'risk' in genetic diagnostics and counselling. In *Foucault and the government of disability*, ed. Shelley Tremain. Ann Arbor, MI: University of Michigan Press; especially the distinction she suggests between laws as 'normative norms' and 'normalistic norms', which require the comparison of people against each other and in relation to a standard such as statistical averages (193–194).

[52] Ewald, Francois. 1990. Norms, discipline and the law. *Representations* 30:138. For a recent discussion of the relationship of law and norms, see Golder, Ben and Peter FitzPatrick. 2009. *Foucault's law.* London: Routledge.

[53] See Burchell, Graham, Colin Gordon, and Peter Miller, eds. 1991. *The Foucault effect: Studies in governmentality*. London: Harvester Wheatsheaf.

operate to confer and shape our bodily, ethical, social and political realities through establishing, consolidating, and sustaining the strictures of 'right and wrong, of valid and void'.[54] This means that individual decisions will necessarily be made in a normative environment, in which norms delimit the boundaries of normal and abnormal bodies.[55] Individual reproductive choices do not escape the normative matrix that shapes perceptions and valuations of possible bodily lives. This entails that human bodies are valuated and regulated through the establishment and imposition of norms. Such norms shape the desirable possibilities for living through the delimitation of the normal and abnormal, with the subsequent risk that the abnormal will be subject to correction or elimination.

In a sense, the general point that I am making here is not especially original – for a number of commentators have used Foucault's account of normalisation to claim that genetics and biomedicine are, or risk being, normalising, because of the ways in which they are embedded within regimes of power and the control mechanisms of biopolitics. For instance, Karen-Sue Taussig et al. articulate this line of critique in their ethnographic reflections on achondroplasia. They argue that the tendency to see the human genome as the site at which 'the human future' can and must be negotiated indicates the persistence of eugenic thinking in the United States of America today. This is not simply the eugenics of old though, but a 'flexible eugenics' that combines individual choice understood as an obligation to be free with 'genetic normalisation'.[56] There is, they suggest:

> a convergence, or constitutive tension, between genetic normalization and an individualization that increasingly engages biotechnology – *biotechnological individualism*. From this tension, what we call *flexible eugenics* arises: long-standing biases against atypical bodies meet both the perils and possibilities that spring from genetic technologies.[57]

While Taussig et al. make no reference to the philosophical justifications for liberal eugenics, it is not hard to see that their critique bears upon this debate, particularly in the emphasis on individual choice.

As an expression of what I am calling the 'normalisation critique' of genetic medicine this perspective is tempting for its greater sensitivity to the normative context in which bodies appear as differentially livable. But this critique suffers from two problems. First, it misunderstands normalisation, in that it implies that normalisation refers to the standardisation of bodies according to a norm imposed upon the atypical or abnormal. It is in relation to such standardisation that the emphasis on individualisation appears as a 'constitutive tension'. But normalisation does not

[54] Cover, Robert. 1992. Nomos and narrative. In *Narrative, violence and the law: The essays of Robert Cover*, eds. Martha Minow, Michael Ryan, and Austin Sarat, 95. Ann Arbor, MI: University of Michigan Press.

[55] See Butler, *Bodies that matter*; Butler, Judith. 2004. *Undoing gender*. New York, NY: Routledge, 40–56.

[56] Taussig, Karen-Sue, Rayna Rapp, and Deborah Heath. 2005. Flexible eugenics: Technologies of the self in the age of genetics. In *Anthropologies of modernity: Foucault, governmentality and life politics*, ed. Jonathon Xavier Inda. Malden, MA and Oxford: Blackwell.

[57] Ibid., 196.

strictly refer to or operate through the homogenisation of the population or eradication of difference at a biological or anatomical level. Rather, 'normalisation' refers to the way in which a standard is established as a norm or principle of comparison and which subsequently allows for the identification of deviations through the designation of normal or abnormal. Foucault's comments in *Security, Territory, Population* are especially revealing of this logic when he suggests that the role of the norm in disciplinary power is better understood as 'normation' than 'normalisation'.[58] By this he means that what is at issue is not standardisation per se, but the process by which norms are formulated and established at all. In this light, standardisation is epiphenomenal in relation to normalisation understood as the constitution of norms.

The analytical consequence of this is that the formulation and imposition of the norm does not simply apply to but actually *precedes* the existential reality of the normal and abnormal. Foucault writes:

> it is not the normal and the abnormal that is fundamental and primary in disciplinary normalisation, it is the norm. That is, there is an originally prescriptive character of the norm and the determination and the identification of the normal and the abnormal becomes possible in relation to this posited norm.[59]

This means that infractions of the norm are *produced* as an effect of the application of the norm, such that the phenomenal particularity of an individual is itself constituted and made evident through the operation of the norm. Because of this, Foucault argues that normalisation is simultaneously totalising and individualising in its operation: normalisation simultaneously establishes homogeneity *and* diversity. That is, the imposition of a norm establishes a common standard and forces those bodies placed in relation to it to reveal their specificity through the identification of divergences from that standard. In this sense, there is no tension between normalisation and individualisation; rather, the latter is inherent to the former.

The second problem with the normalisation critique relates to the way it treats the biological. Foucault's account of normalisation often emphasises the way that norms operate in relation to bodies. While much can and has been said about exactly what he means by 'the body', his account of disciplinary and biopolitical normalisation is most often taken up as a portrayal of the social and political construction of the body through the operation of power. In general terms, this means that the application of social norms has a constitutive effect on the body through differential and evaluative categorisations of it. In short, norms shape the ways that bodies can be understood in the social field. In this vein, the normalisation critique is important

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[58] Foucault, Michel. 2007. *Security, territory, population: Lectures at the College de France, 1977–1978*, ed. Michel Senellart (trans: Burchell, Graham), New York, NY: Palgrave MacMillan, 57.

[59] Ibid. There is then an empirico-theoretical question about whether contemporary configurations of power, including biomedical power, can rightly be described as disciplinary and thus normalising. I do not take up this question here, but see Rose, Nikolas. 2007. *The politics of life itself: Biomedicine, power and subjectivity in the twenty-first century*. Princeton, NJ: Princeton University Press; and Diprose, Rosalyn et al. 2008. Governing the future: The paradigm of prudence in political technologies of risk management. *Security Dialogue* 39(2–3):267–288.

for its focus on the ways in which social norms operate within biomedicine to shape the ways bodies are perceived and understood as normal or abnormal, as desirable possibilities for living or as impossible forms, as impaired or diseased. In this, it provides an important corrective to the neglect in the literature on liberal eugenics and genetics of social norms and the ways they shape reproductive choices. However, in its almost singular focus on social norms, this view misses the opportunity for a more sophisticated account of the interaction of social and biological norms, since the latter are almost wholly obscured.

As Elizabeth Wilson points out, there is a widespread reluctance to discuss biology in contemporary feminist and critical theory, because of a perception that recourse to biological explanation is reductionist, if not necessarily determinist. This has, however, come at the cost of a more engaged understanding of 'the microstructure of the body' and the ways it may actively contribute to culture, signification and sociality.[60] I am not suggesting here that a 'pure', non-normative discourse of biology can resolve the complexity of questions of normality and abnormality. The significance of the normalisation critique is surely that it makes naïve recourse to biology and biomedical expertise in ethics unsustainable. Nor does greater focus on biology entail a return to an impoverished and by now almost entirely polemical debate about the degrees of influence of 'nature' and 'nurture': determining their causal influence for human identity is not what is at issue. Instead, what is required is a theorisation of norms and normativity that starts from the necessarily labile intersection and irreducibility of the social and biological in discussing human bodily variation in bioethics. I will begin to sketch such an approach in the following section.

2.4 The Vitality of Social Norms

Foucault's conception of the norm is social and political, such that he describes the historical regimes of power within which norms gain force. His concern was with examining the political fixation of the normal and abnormal through the operations of power, from his early analyses of the clinic and of madness through to the later genealogy of desiring man. His approach to norms and normalisation attempts

[60] Wilson, Elizabeth A. 2004. *Psychosomatic: Feminism and the neurological body*. Durham and London: Duke University Press, 5. To be clear, I do not mean to imply that liberal bioethics does better in terms of talking about biology. In fact, correlative to the obfuscation of the operation of norms in this literature is a tendency toward genetic reductionism, in which a gene is isolated as the causal origin of complex traits such as intelligence. This is evident in the rhetoric that genetic therapy or enhancement simply requires the identification and modification of a 'gene for' a desirable or undesirable condition or trait. But this reductionism ignores the complexity of the interaction between biological (including genetic), environmental and other factors in human variation. Rich, non-reductionist approaches to molecular biology can and should be used to offset this tendency within bioethics. For a sophisticated critique of the 'gene for' rhetoric, see Oyama, Susan. 2000. *The ontogeny of information: Developmental systems and evolution.* 2nd edn. Durham, NC: Duke University Press.

to reveal the means by which power takes hold of bodies, calibrating and regularising their capacities. In developing this conception of norms and bodily life, Foucault draws substantially on the work of Georges Canguilhem, who in turn extends the work of the neuropsychologist, Kurt Goldstein, both of whom focus less on social norms than on the norms and normativity inherent to the living organism itself.[61] I want to suggest that Canguilhem's considerations of norms can help to redress the obfuscation of the interaction of biological and social norms in the approaches that I discussed above. In what follows, I briefly sketch the approach to norms proposed by Goldstein and Canguilhem, and I conclude this chapter with some comments on the implications of this for liberal eugenic approaches to genetic intervention.

In his 'holistic' approach to understanding conditions of health and pathology in the organism, Goldstein argues that neither statistical nor idealistic conceptions of the norm and normal are sufficient, since neither can do justice to the individual. Instead, he argues that only a norm that 'permits taking the entire concrete individuality into consideration, a norm that takes the individual himself [sic] as a measure'[62] can be adequate to understanding conditions of health, disease and abnormality. From the point of view of the whole individual organism, health amounts to a situation of 'ordered behaviour' which allows the organism to meet the demands made upon it by the environment in which it exists. Disease arises as a 'catastrophic reaction' to changes within an organism such that it is no longer able to meet the demands placed upon it in its 'proper, "normal" milieu',[63] and which thereby threatens the very existence of the organism itself. As this implies, Goldstein makes a distinction between disease and variation from the norm as abnormality: he writes, 'any disease is an abnormality but not every abnormality is a disease',[64] since not every deviation from the normal will threaten the organism in an existential way. Further, rehabilitation from disease is not simply the eradication of a catastrophe, but may come about through the development of a new state of health, understood as a previously non-existent set of ordered relations between the organism and its environment; that is, health is not an ideal condition to which the organism is restored, but an active interaction and 'negotiation' between the organism and its environment.

This insight that health describes functional relations between an individual and its environment is central to Canguilhem's extension of Goldstein's understanding of norms and health in his study of the concepts of the normal and the pathological in medicine. Canguilhem argues that life itself is inherently normative, insofar as

[61] Goldstein, Kurt. 2000. *The organism: A holistic approach to biology derived from pathological data in man.* New York, NY: Zone Books.

[62] Ibid., 329.

[63] Ibid.

[64] Ibid., 326.

it aims at the restoration of functional or 'normal' relations between an individual organism and its environment. He writes:

> Taken separately, the living being and HIS [sic] environment are not normal: it is their relationship that makes them such. For any given form of life the environment is normal to the extent that it allows it fertility and a corresponding variety of forms such that, should changes in the environment occur, life will be able to find the solution to the problem of adaptation . . . in one of these forms. A living being is normal in any given environment insofar as it is the morphological and functional solution found by life as a response to the demands of the environment. Even if it is relatively rare, this living being is normal in terms of every other from which it diverges, because in terms of those other forms it is normative, that is, it devalues them before eliminating them.[65]

For Canguilhem, health amounts to a 'normal' situation, one in which the organism is normatively attuned to its environment and is thus able to meet the demands of it. Conversely, pathology or disease is the incapacity to meet those demands; but while it amounts to a deviation from the normal state, it is not strictly speaking, a situation of disorder or normlessness. Rather, 'the pathological is not the absence of a biological norm: it is another norm but one which is, comparatively speaking, pushed aside by life'.[66] Thus, norms are not only internally specific to the organism but vary across the conditions of its existence, either when its normal condition is disrupted by physiological changes or changes in the demands that an environment places upon it such that it can no longer meet those demands.

But while placing emphasis on the normal as the normative relation between an organism and its environment, this does not mean that Canguilhem privileges stasis or stability at the expense of diversity, divergence and mutation. In fact, he argues that life includes within itself a capacity for errancy that ensures that no state of being is ever entirely fixed. Moreover, for him, even if it is logically second, the abnormal is existentially prior to the norm. Related to this, Canguilhem is careful to distinguish the anomalous from the abnormal, suggesting that the former is a descriptive concept while the latter is evaluative and normative. That is, the anomalous refers to the statistically infrequent, but the abnormal refers to that which is against the normal. But for Canguilhem the relation of the abnormal and normal is not simply one of 'contradiction and externality'. It is instead one of 'inversion and polarity': the abnormal does not exist outside the extension of the norm as such, but indicates a less preferable possibility in relation to the norm.[67] That is, abnormality indicates that all possible modes of living are not normatively equivalent for an organism, since some (and only some) divergences from a norm will be experienced as an obstacle or hindrance in living. As Ewald writes, 'if all possible forms are

[65] Canguilhem, Georges. 1991. *The normal and the pathological* (trans: Fawcett, Carolyn). New York, NY: Zone Books, 144.

[66] Ibid.

[67] Ibid., 239–240.

not normal, it is not because some forms are naturally impossible but because the various possible forms of existence are not all equivalent for those who must exist in them'.[68] Thus, the importance of the designation of the normal and abnormal is not that it indicates simple variation from an a priori model or type, but instead evaluates the ways that such divergences affect the modes of living of an organism in a specific environment.

My aim here is not to provide a full defence of Canguilhem's work as a philosophy of health and disease. Nor am I arguing that the focus on biological norms should simply replace the more socially oriented analyses of Foucaultian scholars. My point is rather that in conjunction with Foucault's conception of biopower and normalisation, this conception of health, norms and disease allows for a focus on the question of the interaction of social and biological norms. Goldstein and Canguilhem are centrally concerned with the relation of an individual organism and its environment in establishing and maintaining a normal or healthy state. However, Canguilhem also claims that, 'the form and functions of the human body are the expression not only of conditions imposed upon life by the environment but also of socially adopted modes of living in the environment'.[69] This suggests that biological and social norms are simultaneously inseparable and irreducible. That is, given that the environment or milieu of a human being is always already social, the idea of the normal must encompass the constitutive tensions engendered by our being in two worlds at one and the same time.

Interestingly, while physiological and social norms are empirically inseparable for Canguilhem, it is also important that they are analytically distinguishable. For instance, he argues that while physiological norms are immanent to the organism, social norms have no equivalent immanence. In a living organism, norms are 'presented without being represented, acting without deliberation or calculation', such that there is 'no divergence, no delay between rule and regulation'. In contrast, rules in a social organisation must be 'represented, learned, remembered, applied'.[70] Further, while biological norms are geared toward a functional end, social norms are not – speaking of the 'health' of a society is metaphoric in a way that speaking of the health of a living body is not. Canguilhem's attempt to distinguish between social and biological norms means that the former cannot simply be extrapolated from the latter, for that would risk collapsing different normative forms and yielding to a version of biological determinism. Nor, however, can assessments of health and disease be made in isolation from or without reference to either social or biological norms. It may be that Canguilhem overstates the analytic difference between social and biological norms; but in any case, what should be clear is that both are constitutively open to transformation.

[68] Ewald. Norms, discipline and the law, 157.

[69] Canguilhem, *Normal and Pathological*, 269.

[70] Ibid., 250.

To return to the debate on liberal eugenics, this characterisation of norms and the conceptions of health, disease and diversity that it gives rise to may provide important leverage in discussions of therapy and enhancement. For one, this provides a way of differentiating between disease and divergence, abnormality and anomaly. In doing so, it may help to recuperate a sense of therapeutic practice aimed at the restoration of health from the potential overreach of the normalisation critique that sees such attempts as an imposition of sociopolitical standards of normality. Of prime importance for this view of health are not 'species-typical' characteristics or functions but the essentially normative relation between an individual organism and the environment in which it exists. Within this view, to attain a normal state for an individual is not to regularise that individual in relation to others or in reference to an abstract 'empirical ideal', but to attain a condition under which the individual itself can flourish, even if that condition appears as statistically anomalous or atypical. Perhaps one controversial example of such a therapeutic practice would be self-demand amputation for 'body integrity identity disorder', in which sufferers are psychologically debilitated by living with a body that is otherwise considered morphologically normal. Or, conversely, the provision of cochlear ear implants to restore hearing may be an important therapeutic practice for some individuals, and not simply a 'normalising' measure that destroys the distinctive identity of Deafness (though it may also be that for others).

This is not to say that the immanent approach to norms that Canguilhem proposes eliminates reference to species-typical traits altogether, but these traits are not the standard from which divergences are therapeutically assessed. In effect, the evaluation of the health of an individual in relation to species-typical functioning confuses statistical norms and therapeutic norms. That is, while the notion of species-typical functioning attempts to describe a non-normative statistical regularity across numerous individuals, the therapeutic question addresses variation in relation to the individual's own trajectory and existential milieu. In other words, while the statistical norm is synchronic insofar as it indicates divergences across individuals in space, therapeutic norms are diachronic in that they allow for the comparison of states within the lifespan of an individual and their assessment as more or less successful forms of living for that individual. Variation and disease, then, are normative in the sense that they require consideration of the value for the living organism of divergences from its normal state of health. No doubt, the opposition between statistical norms and therapeutic norms as synchronic or diachronic is too simplistic on its own, but the basic point is that 'diversity is not disease; the *anomalous* is not the pathological'.[71] The reduction of one of these categories to the other entails collapsing different conceptions of norms that should be kept analytically distinct.

The perspective that I propose also allows for a more differentiated approach to the question of human enhancement. As we saw in the first section of this chapter, the idea of the normal has been mobilised in various ways in debates on therapy

[71] Ibid., 137.

and enhancement, often appearing as the point of descriptive and moral differentiation between them. In response to this, other commentators have rejected the notion altogether, claiming that it cannot do the work of distinguishing therapeutic interventions from enhancements. Indeed, they reason that as it is not possible to distinguish between therapy and enhancement, the latter must be as morally acceptable (if not obligatory) as the former. I argued, though, that even these theorists unwittingly rely upon an idea of the normal. The question, then, is whether the normal can be recuperated in such a way that it does not commit one to either a strong conception of human nature or of species-typical functioning and their attendant problems. I have argued that it can be; moreover, it can be in such a way that does not lead to an overly simplistic *tout court* rejection or endorsement of enhancement technologies. As Joanna Zylinska has argued, being 'for' or 'against' enhancement is an 'impossible position to sustain'; instead, the ethical task in relation to enhancement is '*knowing how to differentiate*' and '*how to use our prostheses well*'.[72] The kind of internally differentiated conception of the normal that I am proposing here, which focuses on the flourishing of an individual as a living being in its always already social environment, may be one of the tools we need in order to take up this task.

2.5 Conclusion

I began this chapter by examining three different approaches to the problem of the 'normal' and its use as a standard of moral differentiation between therapy and enhancement. This provided a way of considering the extent to which the idea of the normal undermines value pluralism, a key principle in establishing the liberality of liberal eugenics. I argued that defences of liberal eugenics fail to take adequate account of the force of social norms in shaping individual decisions. In the second section I elaborated on this through the 'normalisation critique' made by scholars who draw on the work of Foucault in their discussions of genetics and eugenics. Of the 'normalisation critique', I claimed that an over-zealous focus on social norms obscures the contributions that the immanent norms of the body may make to questions of health and normality. Finally, I provided a brief sketch of an alternative way of thinking about the idea of the normal human being that starts from the complex interaction of social and biological norms. This idea allows for an ethical recuperation of the normal, without relying on problematic conceptions of species-being, or externally applied idealising standards against which anomalous bodies are judged to be inadequate. In this, recognition of the constitutive tensions and transformability of the notion of the normal can allow us to more fully confront the ethical task of our own self-making.

[72]Zylinska, Joanna. 2010. Playing God, playing Adam: The politics and ethics of enhancement. *Journal of Bioethical Inquiry* 7(2), 155, 158.

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