

Scientific Contribution

Constructing critical bioethics by deconstructing culture/nature dualism

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Abstract. This paper seeks to respond to some of the recent criticisms directed toward bioethics by offering a contribution to a “critical bioethics”. Here this concept is principally defined in terms of the three features of interdisciplinarity, self-reflexivity and the avoidance of uncritical complicity. In a partial reclamation of the ideas of V.R. Potter, it is argued that a critical bioethics requires a meaningful challenge to culture/nature dualism, expressed in bioethics as the distinction between medical ethics and ecological ethics. Such a contesting of the “bio” in bioethics arrests its ethical bracketing of environmental and animal ethics. Taken together, the triadic definition of a critical bioethics offered here provides a potential framework with which to fend off critiques of commercial capture or of being “too close to science” commonly directed toward bioethics.

Key words: bioethics, critical bioethics, environmental ethics, interdisciplinarity, issues in bioethics, sociological approaches

Introduction

Bioethics has been subject to wide ranging critique from both within and without. This paper seeks to re-frame bioethics through a positive response to some of these criticisms and to ethically reinvigorate it as a field of critical knowledge that better grasps the wider ethical picture of contemporary technoscientific innovations. This paper contributes toward what is termed a “Critical Bioethics”¹ which is arrived at by a general strategy of contesting the split between culture and nature in bioethics. Anti-dualistic strategies are more familiar in other ethical arenas, notably feminist and environmental ethics. Yet this is apt since this paper will also argue against acts of “ethical enclosure”, in particular underlining the importance of a closer relationship between bioethics and environmental ethics.

During this research, it became apparent that V.R. Potter, who coined the term bioethics in 1970, had clearly intended this closer relationship, which he returned to in his idea of “Global Bioethics” (1988). The contemporary narrowing of bioethics to a primary concern with the application of philosophical principles to *medical* ethics appears

as both a confusing and unfortunate act of enclosure. While many of today’s leading bioethicists may no longer give due importance to Potter’s work it arguably contains important elements in danger of being forgotten. His vision for a mutually intertwined and informative medical *and* ecological bioethics is as relevant as ever. I will complement this with some of my own reasons for challenging the boundary between bioethics and environmental ethics under the general rubric of contesting the “bio” in bioethics.

First, to be critical, bioethics must be *interdisciplinary*. Reducing bioethics to the narrow preserve of a certain branch of philosophical expertise stakes a certain claim over the ethical, and discounts the important contribution of other disciplines or other philosophical perspectives. The *self-reflexivity* expressed in contesting the “bio” in bioethics forms the second element. The narrowing of bioethics to medical ethics, or sometimes “biomedical” ethics, represents an unreflexive anthropocentric conception of the “bio” in bioethics which also tends to downplay socio-political, socio-economic and ecological inputs into human health. Third, bioethics must avoid an *uncritical complicity* with unexamined views of scientific

rationality and progress. Employing a philosophical perspective that espouses a similar rationalist worldview as the science it claims to ethically watch over runs the danger of complicity, and of failing in a broad questioning of potential technoscientific change.

These three features can form mutually reinforcing and overlapping elements of a more critical bioethics. This is not intended to be a comprehensive and final definition but the beginning of a conversation. A redefinition of itself both in terms of interdisciplinarity and a wider notion of the “bio” in bioethics, as I will demonstrate, both occur through the problematisation of culture/nature dualism,² and hold the promise of a bioethics that is better positioned to argue whether a particular technology or decision making process is either “ethical” or for the social good.

Bioethics and interdisciplinarity

The problematic of culture/nature dualism that shadows almost all discussions on interdisciplinarity opens up two main areas of critique of relevance to bioethics. For questions over interdisciplinarity³ and bioethics relate not only to which disciplines ought to be allowed a bioethics voice, but *also* involve debates over what constitutes the subject matter of bioethics. Strictly delineating subject matter encloses as much as the view that one discipline, or indeed one paradigm of one discipline, be hegemonic. These delineations remain implicitly and somewhat surprisingly structured by traditional positivistic notions of disciplinary hierarchy. Thus bioethics has tended to uncritically bask in the scientific prestige of discourses such as universalism and rationalism, perhaps the two normative discourses that have come in for the most criticism from critical social theory in the past 30 years. It is then not surprising that in recent years a significant challenge to possible hegemonic tendencies in bioethics has come from sociology, and social science more generally. In parallel to joining this debate here I also wish to flag an issue over *subject matter* which also dovetails with my argument for self-reflexivity as an element of a critical bioethics. By contesting the “bio” in bioethics and so leading into the second section of my paper I will ask questions of what I see as the anthropocentric bias in bioethics which underlines a split between human issues and environmental/animal issues.

My primary personal substantive interest in bioethics centres on the ethical and social aspects

of the new genetics and biotechnologies, yet it is clear that engagement with these areas includes only a small part of what is currently known as “bioethics”. Indeed, shifting emphasis in subject matter attests to the temporality of what is understood as appropriate bioethical subject matter. Moreover, there may be differing emphases in different parts of the world. Although a partial, yet increasingly pertinent, bioethical focus, the new genetics and biotechnologies do serve an initial heuristic purpose for my argument. For they illustrate a divide that I wish to contest in this paper. Often the phrase “new genetics and biotechnologies” is employed to refer to medical human aspects on the one hand (new genetics) and applications to nature on the other (biotechnologies).⁴ This is also sometimes expressed in the idea of “red” and “green” bioethics. Below, I shall argue against the feasibility of this divide and for a position that brings bioethics and environmental ethics much closer together. First I want to concentrate on the former issue of interdisciplinarity and bioethics, and argue that the social sciences are crucial to a critical bioethics.

At first glance, it might be said that deliberations on the relationship between philosophy and the social sciences in bioethics represent a shallow type of interdisciplinarity. In this way, the “real” goal of interdisciplinarity ought to be to bridge the divide between the natural and social sciences. In a sense, this is correct and bioethics ought to have an important bridging function in this respect. But it ought to be specified just what is intended by “bridging the divide”. In the context of bioethics, there is a role for educating scientists on the ethics and social impacts of new technologies. In effect this bringing of values into the sphere of “natural science” acts as a healthy check against continued scientific myths of neutrality and naïve realist views of scientific “facts” as purified of values. However, given the tendency of many bioethicists to take empirical science as read, I would suggest that this can only really happen effectively when there is a closer relationship between bioethicists and sociologists of science.

The International Association of Bioethics (IAB) defines bioethics as the ‘study of the ethical, social, legal, philosophical and other related issues arising in health care and in the biological sciences’.⁵ Interestingly, this is a definition not held by all bioethicists, yet its breadth encourages an interdisciplinary approach to bioethics. Definitions of fields can be problematic and perhaps do not always entertain their temporal and contested nature. One area which serves to underline the

currently contested definition is precisely the social science engagement⁶ with bioethics that began in the mid 1990s (DeVries, 1995) and has since developed into a wider critique of bioethics. Yet this should not be the case of a social science ‘straw man’ critique of philosophical bioethics since it should be recognised that the contemporary challenge to hegemonic definitions also comes from “within” bioethics (see, for example, Campbell, 1999). The social science critique may be tenuously divided into two related areas, both of which take issue with a perceived decontextualisation found in bioethics and specifically its adherence to “principlism”. First it has been argued that the framing of (bio)ethics around the four principles of “autonomy”, “justice”, “beneficence” and “non-maleficence” (Beauchamp and Childress, 2001, 5th ed.) falsely abstracts and universalises bioethical issues, and furthermore, that this context-stripping ought to be addressed by empirical research that addresses the lived, experiential and complex particularistic nature of ethical decision making (see, for example, Benatar, 1997; Chadwick and Levitt, 1997; Light and McGee, 1998; DeVries and Conrad, 1998; Gervais, 1998; Schotsmans, 1999; Spallone et al. 2000; Haimes, 2002; Levitt, 2003). The adherence of some bioethicists to principlism has also been critiqued for putting too much emphasis on “autonomy” or conceptualising it non-relationally (Holm, 1995; Donchin, 2001), and for foregrounding consequentialist arguments (Chadwick and Levitt, 1997). Principlism has had less influence on continental Europe where alternative approaches such as “personalism” have emerged. In contrast to an over-emphasis on autonomy, personalism requires a balancing of the value-orientations of individual uniqueness, social relationality and societal solidarity (Schotsmans, 1999, p. 18), making it, like feminist bioethics, attentive to the social and societal context of ethical decision making and faithful to a construction of moral agency as inherently relational.

This critique alerts us to the danger of a distanced bioethics which may make policy recommendations without much awareness of how ethical decisions are made in everyday life, adopting the classical gods eye view and assuming an out of date notion of a disembodied, non-emotional representation of social action and actors. Perhaps the context-stripping theoretical method par excellence found in bioethics, as Levitt points out (2003, p. 15), is the strategy of constructing a hypothetical case in which actor X and/or Y is faced with such and such a moral decision. Whilst not without heuristic value this is essentially a bioethicist’s

laboratory in that s/he can completely control the actors and events that occur as if to demonstrate an ethical case, yet without making any reference to social realities that might reveal “messy” relationships and emotions between actors.

This kind of argument against abstraction and the case for empirical methods in bioethics have been argued forcefully by the authors above, and so I want to put more stress here on the second, related social science critique of bioethics which I assert as being the general inattention to socio-political and socio-economic contexts in bioethical argument. This, I argue, can be remedied by a better interdisciplinarity and can make an important contribution to the avoidance of *uncritical complicity* in bioethics, and a critical bioethics more generally. It would be a narrow interpretation of social science to assert that the only role it may have could be to supply “factual” empirical data for the refinement of bioethics. For this interpretation, which Haimes describes as the “handmaiden role” (2002, p. 89), discounts the normative critical tradition in the social sciences that coalesces around an integrated examination of power, figured primarily in a nexus of class, “race” and gender relations. More recently, this nexus has been complimented by social sciences approaches to nature, especially within the context of analyses of globalisation. At a time when bioethics faces contestation from within, for example, from feminist bioethics⁷ (Purdy, 1996; Rawlinson, 2001; Tong, 2003) and from those arguing against neo-colonial Western ethics and the importance of other ethical traditions (Holm, 1995; Gervais, 1998; Widdows et al., 2003), it seems that the critical social science tradition has much to offer bioethics, not least the elaboration of the socio-economic and socio-political contexts in which ethical decisions are made. Tensions certainly can be noted here in the way that for example new genomic knowledge sometimes aided by bioethics rides a reckless biological and ahistorical reductionism over decades of sociological research into such areas as sexualities, gender and general explanations of social behaviour.

A learned attentiveness to both economic and non-economic relations of power provides a vital corrective to the view of a level playing field to which ethical principles can be applied. The knowledge of the historical role that biological reductionism has played in naturalising such relations of power furthermore provides the social scientist “doing bioethics” with a critical stance toward the contemporary reproduction of such discourses, especially in genomics. As DeVries and

Conrad (1998, p. 253) have argued previously, a sociologically informed bioethics looks somewhat different and asks different questions. To give some examples, in the case of sex selection it may be argued from an autonomy viewpoint that parents have a right to select for sex to achieve what is often referred to as a familial “gender balance”. Yet from a critical social science viewpoint it could be pointed out that this makes many assumptions about gender (what boys and girls are, and what they can or cannot do) and that sex selection could contribute to such gender essentialist points of view. Thus doing bioethics from this perspective would think about the potential impact on the wider societal context. A self-defined individual good may not be the same as a social good.

In the case of egg donation one fertility agency has now begun to advertise payment for women willing to donate their eggs. In late 2002 the case of two British students who sold their eggs to a Californian agency for approximately £4000 came to light.⁸ In the case of this company the amount paid to an egg donor depended on factors such as their qualifications, what they looked like, what the infertile couple were requesting and whether or not they had donated before. Donors are asked to send photographs of themselves, their siblings, and any children they may have. Whilst on the one hand we may want to support the right of these young women to make money, the fact that they were in a financially exploitable social position, and that the philosophy of the Californian agency espoused both a deterministic view of intelligence *and* appearance should also be part of the bioethical agenda.

A final example of socio-political contexts is the move by companies such as Advanced Cell Technology (ACT) to clone endangered animals such as the Banteng. This could appear as an unproblematic philanthropic use of genomics in the cause of animal conservation. Yet it could also be seen as a technological fix that is neatly complicit with wider cultural and economic factors which drive habitat loss and over-development, and excuse measures to tackle these underlying problems. Figuring into bioethics the kinds of arguments raised by these examples would arguably encourage a more grounded and global bioethics. In his 1999 IAB Presidential address Alistair Campbell discussed not only the possibility of a “global bioethics” but also expressed many of the criticisms of bioethics put by social scientists, stating “I think it is notable that, despite some remarkable initiatives in virtue ethics, feminist bioethics and narrative ethics

applied to health care, the bulk of bioethics literature is still predicated on the methodological assumptions of the rationalistic empiricist schools which have dominated Anglo-American philosophy. Certainly in some European countries there is fascinating work based on the more radical implications of post-structuralism for an understanding of health and health care, but little of it seems to find its way into the ‘mainstream’ English language bioethics journals” (1999: p. 186). This underlines how the field of bioethics, by being open to interdisciplinarity, is gradually being contested both by other philosophical traditions and social science perspectives, despite being prone to persistent prior rationalist and consequentialist hegemonies.

In spite of the critiques of bioethics from various social science and feminist perspectives, none of these authors have said anything of note on the reduction of bioethics to medical ethics. Continuing in this self-reflexive vein this paper now moves on to expand the notion of a critical bioethics to say something on the subject matter and take issue with what may be argued is a narrow, anthropocentric conception of the “bio” in bioethics.

Contesting the “bio” in bioethics

The belief that bioethics can enclose an effective consideration of the ethical impact of the life sciences around *human* health and decision making perpetuates the dualistic assumption that humanity somehow exists apart from nature. This takes bioethics on a head on collision course with a central argument from environmental ethics that it is *just this* separation that has encouraged the Western human to deny dependency and value to nature. In contrast to such potential conflict the intention in this section is to bring medical and environmental ethics closer together and in so doing contribute to a critical redefinition of bioethics. This approach shares some commonality with that of Potter’s (1988) formulation of a “global bioethics”, more of which below. The “bio” in bioethics should be conceptualised to be attentive to the interconnections between the human, ecosystems and non-human animals. Moreover, taking a cue from some forms of environmental ethics,⁹ the “bio” in bioethics should be more reflexive to its own anthropocentrism, incorporating the analysis of an ethics of relationality between human and non-human. In other words owing to our ecological embeddedness

human well-being is tied in part to that of other species.

I will spell out three main arguments for why I think bioethics ought to be redefined to be more ecological.¹⁰ The first set of arguments relate to definitions of “health”. What is excluded from our definition if we exclude ecology? Second, I will illustrate some interconnections between human medical ethics and animal ethics. Arguably these two are only kept separate owing to an instrumental attitude to animal life within bioethics.¹¹ Third, it is an obvious but important point that many of the medical and scientific issues with which bioethicists concern themselves are innovations and practices that act upon the human body. I will argue that dominant biomedical attitudes to the body are filtered through a loyalty to dualism. Through a dualistic lens there is a tendency to construct the body solely as part of nature rather than also culture which necessitates that bioethicists bear in mind that technological applications to the human body may be part of a wider cultural trend to master nature. Whilst this is neither a conspiracy theory nor simplistically a pernicious or conscious trend it is one that carries with it clear risks to the well being of all *bios*, defined now as human and non-human.

The critique of the medical model of health is hardly new. Its main point is that it conceives “health” as a property of a bounded individual body (e.g. Freund and McGuire, 1995, p. 206; Bowring, 2003, p. 145/146), as opposed to an alternative relational definition that figures health as also situated within historical, political, social and ecological contexts. The medical model favours medical responses over environmental and/or socio-political responses (such as tackling social inequalities in health by introducing anti-poverty measures). This inattention to a person’s social positionality (see Tong, 2003, p. 95) and ecological embeddedness also lends itself to locating responsibility for health and illness with individuals themselves. Moreover, it is not difficult to see how a bioethical emphasis on individual autonomy could reinforce such definitions of health. This need for reflexivity is all the more surprising given that Potter’s original notion of bioethics in the early 1970s incorporated a much broader notion of health than the classic medical model, including, for example, ecological considerations. In his original text *Bioethics – Bridge to the Future* (1971) Potter was concerned that “medical science has thus far not penetrated very deeply into the question of what constitutes an optimum environment for the human species” (p.

104). In his follow up *Global Bioethics*¹² (1988) Potter expands upon his integrated view of bioethics. This text put labour into developing his 1970s model of bioethics that gave equal weight to what he termed *medical and ecological* bioethics. Whilst Potter sees a difference between these two in that medical bioethics is understood as more concerned with short-term action to improve and prolong the life of individuals and ecological bioethics as more fundamentally related to long-term attempts to preserve ecosystems for the benefit of human health, he ultimately seeks a harmonisation of the two under a general movement for “global bioethics” (ibid., pp. 74–78). He laments the divergence of medical and ecological issues into their own fields, a narrowly conceived bioethics and environmental ethics. As Engelhardt writes in his foreword, “Bioethics the term, has developed its own history with little regard to Potter’s original intentions” (1988, p. x). Against the grain of these developments Potter attempts to weave in issues such as hazardous waste, the degradation of water resources and chemicals in the environment alongside more traditionally conceived medical issues.

In spite of this partial reclamation Potter is not a panacea for contemporary bioethics.¹³ For example his evocation of environmental issues exhibits a preoccupation with population control, gives undue weight to individual responsibility and is arguably ethically shallow given the mostly anthropocentric reasons for including ecology within his wider definition of health. Despite these criticisms Potter *is* worth returning to precisely because of his main argument that bioethics ought to foreground a definition of health that is attentive to the interconnections between the human and the environment. The reduction of bioethics to medical issues echoes traditional dualistic notions of the human as somehow separate from nature. This is odd since it is now hardly profound to think of the many linkages between the health of the environment or animals and that of humans. Examples include the risk of increased skin cancer due to the degradation of the ozone layer, potential risks to human health from intensive agriculture and the risk of CJD to humans by forcing carnivorous eating habits upon cattle, to name only a few. Moreover, it is reasonable to assume that when large scale research such as the Human Genome Project and UK Biobank reveal the limits to the determining power of genes, scientists are going to want to know much more about the interplay of bodies and environments, construed broadly. This is likely to have a knock on effect for Bioethics.

Taking Potter's central argument on board can assist us to do bioethics which ontologically takes the human as both embodied, and as embedded in nature. These are central arguments of many environmental ethicists who seek to move us away from dualistic understandings of the human as somehow disembodied and separate from nature (e.g. Mellor, 1997). It would be unfortunate if contemporary bioethics, by ignoring links to environmental ethics and issues, were to inadvertently support this obsolete Enlightenment notion of what the human is.

The exclusion of nature not only threatens to compromise our understandings of health within bioethics, but it also lessens the likelihood of considering animal ethics. Though not a point raised by Potter, the shift he laments from bioethics to biomedical ethics, is also an anthropocentric move that decentres considerations of animal ethics. This exclusion juxtaposes incongruously alongside a present context where genomics brings animal ethics increasingly to the fore. Whilst perhaps not yet on a Darwinian scale, developments in genomics problematise the boundary between humans and animals, for example, illustrating degrees of genetic similarity. Despite this, genomics has effectively served to reverse an otherwise downward trend in animal experimentation and so reinforces the human instrumentalised ethical relation to animals. Often animals are used with some future human technological application as the pretext. This is the case for example with cloning research, vaccine research and ovarian transplants. Xenotransplantation has also required much animal research without the certainty that it will either be a viable technology, or whether it is the best method to tackle the donor deficit problem. Other less invasive animal related aspects of genomics have included research on the sequenced genomes of other mammals to gain insight about human health and illness, and the retrospective study of chromosomes to learn more about the histories of different species. Many of these examples convey that present and proposed medical treatments for humans involve animal research and so raise complex issues of our ethical relation to (other) animals, most notably I argue, the paradoxical trend of increased kinship alongside increased instrumentalisation. Can they justifiably be bracketed out from bioethical discussion? Irrespective of our positions on the moral value of animals it is simply a poor bioethics that glosses over diverse research contexts which ethically frame animals and then act upon that framing. Giving due place to animal ethics within bioethics addresses

anthropocentric ethical enclosure and broadens our understanding of the "bio" in bioethics.

My final point in this section of using *self-reflexivity* to contest the "bio" in bioethics links aptly to my third and final constituent part of a "critical bioethics": namely the importance of avoiding an *uncritical complicity* with unexamined notions of rationality and scientific progress. To lead in to this I want to briefly discuss biomedical attitudes to the body and argue that they may be another reason for critical bioethicists to make links with environmental ethics. Earlier under the interdisciplinarity section I discussed sociological perspectives on bioethics. At this juncture it is relevant to compliment that by stressing the value of *historical* perspectives to bioethics. For example, the omission of historical analysis risks losing sight of trends and patterns in biomedicine which in this case may have a bearing on medical attitudes to the body. Historical research locates science and specifically biomedicine as a part of culture and enables us to see how it has been subjected to broader structural trends. Freund and McGuire argue that modern medicine has been partly shaped by the broader cultural trend of rationalisation which they define as "the application of criteria of functional rationality to many aspects of social and economic life, the promotion of bureaucratic forms of organisation and an emphasis upon efficiency, standardisation, and instrumental criteria for decision making" (1995, p. 212). For them this was bound up and expressed in the phenomena of medicalisation wherein biomedicine gradually assumed authority and control over new areas of social life. Important here was a technical, disenchanting view of the body as dualistically separate from the (rational) person and amenable to scientific improvement. Inserted into a Western historical dualistic narrative biomedicine represents the cultural domination of human physicality, which is assumed to symbolise nature. But the traditional biomedical view that the body simply represents nature uncritically reproduces a dualistic view that not only separates mind from body, but also discounts the social, economic and cultural construction of the body.¹⁴ There exist good historical and contemporary examples of medicalisation where biomedical culture views the body in this dualistic way.¹⁵ The classic example remains the medicalisation of pregnancy and childbirth, but extends now to the pre-conception control of fertility. Furthermore, Ritzer has argued that we also now see the medicalisation of death ranging from the efforts of biomedicine to artificially prolong life to the increasing use of cremations as

a faster and more efficient means of disposing of the dead (1996, pp. 170–174). It is interesting to think of the obvious ways in which humanity is embedded in nature with reproduction and death two such processes that cannot fail to remind us of this fact. Yet these are exactly two of the main processes which have been subjected to attempts at biomedical control. I would suggest that genomics (itself a reduction of the human to genes) evokes such ambivalent emotions of hope and fear precisely because if carried through in a reductionist and dualistic manner there are obvious risks of the objectification of “defective” or “deviant” bodies. In this light it is possible to see genomics as perhaps one of the most ambitious attempts yet to extend the human domination of nature, only this time we, or rather, *our* object bodies are the target of our own attempts at mastery or “enhancement”. This provides one further reason why bioethicists may wish to consider closer ties with environmental ethics since it could be imperative to think through the ways in which there are connections between the human mastery of the environment, understood as ecosystems and non-human animals, and the biomedical control of the human body, understood (incorrectly I have argued) as “nature within”. The particular worrying point for bioethicists is that if contemporary science and medicine retains the enlightenment view of “nature” and the “body” as dualistically separate from culture and mind, and as “mechanical” or lacking in “consciousness”,¹⁶ then we are encouraged to disregard any significant need for ethical response. Clearly the erosion of moral restraints from physicalities (human and non-human) facilitates processes of commodification. This trajectory is not inevitable, so-called “mastery” may be benign, or indeed beneficial, and new scientific understanding need not be inherently pernicious by any means. However, there is a responsibility here for bioethicists to be more attentive to the power of science and medicine, and that this attentiveness can be accentuated by closer ties with both historical perspectives and critical environmental ethics. One reason behind this lack of attentiveness may be related to an *uncritical complicity* with unexamined notions of rationality and scientific progress, and it is to this final aspect of my discussion that I now turn.

The question of uncritical complicity

The previous example of body commodification tells us that scientific faith in dualistic kinds of rationality may be ethically dangerous and expose

what many authors have referred to as the “irrationality of rationality” (e.g. Bauman, 1989; Ritzer, 1996). This serves to underline just how “question-begging” attempts to define bioethics on the basis of “rational decision making” are (e.g. Harris and Holm, 2002, p. 357). What *is* the rationality concept being utilised here? For example is it seen as a human universal, and is it exclusionary of emotion? Rationality then, I would argue, ought not to be deployed by bioethicists in an essentialist manner, evoked as a strategy of tying up an argument, with the assumption that it stands for something fixed and eternal, instead of constructed. The partiality of rationality was recognised by Campbell in his 1999 Presidential address to the IAB when under the heading of “The Tyranny of Rationalism” he wrote “Our idea of ‘free, open and reasoned’ has been shaped by a particularly western mode of reasoning, one which has been remarkably successful in enabling the emergence of an all-controlling technology, but is by no means the only way, or even the best way, of establishing our ethical signposts. It cannot be accidental that such a way of doing ethics fits neatly into the idea of constant economic progress as an end for humanity” (1999, p. 186). This is similar to what Arthur Frank has termed a “protectionist bioethics”, one which operates within a consumerist frame of reference and foregrounds individual choice. For Frank, one problem with this type of bioethics is that it “has trouble taking seriously how one’s individual choice...affects others” (2004, p. 19). One can refer this back to the sex selection and egg donation examples above where individual choices have social consequences. The possibility that bioethicists are intellectually or commercially captured is less surprising if there is a common discourse of rationality and progress at play. This is not to say that bioethics should position itself as antagonistic to ‘science’, but rather that it does have a role, where required, to communicate to scientists and policy makers the constructedness of scientific knowledge and the specificity of scientific values, and it simply cannot do that if it uncritically apes entrenched Enlightenment era notions of rationality. As Campbell notes, bioethicists may think of rationality in a number of ways, such as acting in a self-interested manner or of departing from any notions that conceive of nature and human bodies as sacred (ibid., p. 187). Yet such ways of deploying the “rational” are partial and as argued above discourses of desacralisation may act as precursors to instrumentalised treatment. Bioethicists also ought to reflect upon their own professionalisation and

“expert” status which may incorporate a dualism of *rational philosophers* versus that of an uneducated *emotional public* often typecast through the dismissive idea of the “yuk factor” response to new science and technologies. It could be argued that this dualistic representation is yet another deceptive deployment of the idea of facts versus values. Some of the criticism of bioethics relates to how bioethicists act, and how bioethics is represented, in non-academic spheres especially in relation to commercial interests (see Ashcroft, 2004; McMillan, 2004; Elliot, 2004). Broad self-reflexivity to one’s role is a vital component to promoting critical bioethics. McMillan (2004) provides a useful discussion on this with his distinction between moral analysis and moral criticism in bioethics. As he points out, most people “doing bioethics” do both of these to differing degrees (p. 170). The crux is that if bioethicists veer too much toward analysis they risk resembling an archetype of the disinterested “value-free” theorist which denies or disguises what many see as our essential “interestedness” (see Ashcroft, 2004, p. 163).

Philosopher Grant Gillett has recently added to Campbell’s “critique from within” of the use of rationality in bioethics. He argues humourously that what passes as rationality within some arguments made by bioethicists resembles types of unreason more commonly associated with people with psychological problems. For example, he names one of his types of unreason “the Humean reduction and vicious reframing” which is defined as “the narrowing of focus to features that omit elements of a situation of central relevance in forming a moral judgment” (2003, p. 256). This brings to mind the problems of abstraction in bioethical argument discussed earlier. Several of Gillett’s conclusions also chime with the anti-dualistic arguments above. He argues for a relational conception of ethics, seeing our moral values as grounded in affective social relationships. In doing so an understanding of rationality as not dualistically separate to the emotional is stressed.

I want to finish now by providing two examples that further highlight the problems of basing ethics on a rationality which is separate from the social or from emotion. Moreover, these are elements of a rationality that mirror classic enlightenment, dualistic models and provide the bioethicist with a limited critical vantage point toward new developments in science and technology. They also bear upon the important question of what constitutes progress.

One of the most fundamental issues thrown up by genomics is the possibility of active genetic

selection of newborns. Taken to the extreme this could take the form of “germline enhancement” of the human. Whilst Pre-Implantation Genetic Diagnosis (PGD) is already used to screen out embryos with inherited genetic conditions, genomics could allow us to actively compose newborns in terms of non-disease genes or outcomes. For example sex selection. The bioethicist Julian Savulescu argues through his principle of “procreative beneficence” that “couples (or single reproducers) should select the child, of the possible children they could have, who is expected to have the best life, or at least as good a life as the others, based on the relevant, available information” (2001, p. 413). He specifically orientates his discussion to non-disease traits such as intelligence, sex selection and makes hints towards physical features such as height. Clearly aware that his principle is open to the accusation of eugenics he argues that “A public interest justification for interfering in reproduction is different from Procreative Beneficence which aims at producing the best child, of the possible children, a couple could have. That is an essentially private enterprise” (*ibid.*, p. 424). It could be countered that a weak public/private distinction is being made here since it is hardly a private enterprise if such action is socially endorsed or encouraged. Perhaps more compromising to his principle is that it is dislocated from the social. In other words presumptions are made over the content of “best life” and “best child” with insufficient attention to how these are socially and historically mediated. For example normative prescriptions to select for intelligence not only assume it to be a quantifiable attribute but that it can be shown to be meaningfully genetically determined. Moreover, normative prescriptions to select for physicality ignore how the evaluative scaling of different bodies is a social construction bound up in interconnected relations of power such as class, gender, “race” and class. (see chapter 5, Young, 1990). Any venture into “cosmetic genomics” would however represent the logical trajectory of a “rational” Enlightenment project ill at ease with embodiment generally, and “deviant” bodies specifically. Despite Savulescu’s surprising backtrack that “the best option is that we correct discrimination in other ways, by correcting discriminatory social institutions” (*ibid.*, p. 425), procreative beneficence does imply the technological fix of using genomics to combat social inequalities (see Bowring, 2003, p. 180) that would set its own normative agenda.

The further question of whether in the future we should use new technology to extend the human lifespan also raises issues over our uses of reason

and our notions of progress. From an evolutionary biology perspective Glannon has urged caution in this research arguing that it could lead to a higher incidence of genetic mutation in earlier life (2002), not in the short term where there may be benefits but in the distant long term. His caution is based on a concern for the protection of future generations. Harris and Holm (2002) argue against his position by attacking the ethical deployment of the precautionary principle more generally. For them the precautionary principle “requires science to be ultra-conservative and irrationally cautious and societies to reject a wide spectrum of possible benefits from scientific advance and technological change” (p. 357). Yet caution seems highly prudent in the case of developments around genomics. Due to their scientific novelty they are open to potential uncertainty especially in relation to possible future harm and unforeseen unintended consequences. Harris and Holm’s words may rather be seen as illustrative of the arbitrariness of strategic uses of a discourse of what is or is not rational to support a partial view of progress. Apart from any evolutionary biology argument, *sociologically* the hypothesis of human lifespan extension¹⁷ touches upon cultural attitudes to death, dying and ageing. Any bioethical discussion of extending the human lifespan ought to occur in recognition of a social context where the elderly and aged bodies are culturally devalued, and death and dying remain taboo issues which remind us of both our connections to nature and vulnerability. Thus research into lifespan extension does not take place within a socio-political vacuum but could be said to confirm a hegemonic cultural value that death and ageing are somehow offensive to a rationalised view of the human. However there are associated aims here about reducing illness and suffering in later life that may be distinguished from that of extending human lifespan, but it is certainly contestable that biomedicine should be given the starring role in improving welfare amongst the elderly in lieu of improved social policy and material support. Precaution then may be prudent here not solely due to the unforeseen consequences of biomedical research, but also because of how that research may be complicit with ultimately damaging assumptions that our notions of rationality may make of ageing and death.

In conclusion I have presented an interlinked three way definition of a critical bioethics that coalesces around the concepts of *interdisciplinarity*, *self-reflexivity* and the *avoidance of uncritical complicity*. This definition I suggest initiates a process that answers some of the major criticisms of

bioethics and would better equip it to act as a meaningful ethical check upon new developments in science and technology that impinge upon a bios, understood here in a non-anthropocentric way. I have arrived at this understanding of a critical bioethics partly by taking a critical stance toward dualisms, a strategy more familiar to environmental ethics. This hybridisation and exchange of methodology acted as an appropriate catalyst for thinking through some of the criticisms that have been made of bioethics by those both in and outside the field. Many of these may be justified and it is hoped that this paper goes some way toward re-orientating bioethics so that critique is more something that emanates out, rather than rains in.

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Notes

1. The addition of the word “critical” has recently prefixed other disciplines. What Fox and Prilleltensky say of their “critical psychology” also, I would suggest, holds true for my construction of critical bioethics, “Psychology is not, and cannot be, a neutral endeavour conducted by scientists and practitioners detached from social and political circumstances. It is a human and social endeavour. Psychologists live in specific social contexts. They are influenced by differing interests and complex power dynamics” (1997, p. 1). Here, it is not intended to herald the formation of a new sub-field, but rather as a strategic reflexive space in which to consider the state of Bioethics.
2. Dualism is an entrenched, gendered Western discourse that constructs the human as “rational”, and as hyper-separated from nature, the body, and emotionality. It is more than mere dichotomy and posits hierarchical relations between sets of paired terms. For a detailed philosophical discussion of dualism from an environmental and feminist viewpoint, see Plumwood (1993).
3. My views on interdisciplinarity and bioethics are heavily informed by my participation in the Wellcome Trust “Bioethics Today” Project (<http://www.bioethics.today.org>). This UK Web-resource for bioethics espouses an interdisciplinary approach to bioethics including medical, agricultural and animal ethics.

4. Consequently, from now on I will use the term “genomics” to avoid this split.
5. <http://www.bioethics-international.org/>
6. Social science engagement with bioethical *issues* of course pre-dates the advent of bioethics itself, with the tradition of medical sociology for example. Although DeVries’ review essay is one of the first explicit works on a sociology of bioethics, he alerts the reader to much older calls for sociologists to explore bioethics (e.g. Fox 1976).
7. Feminist bioethics can seem strangely detached from wider literatures of feminist theory. For example there are at present, I would argue, insufficient connections made between feminist bioethics and feminist science studies.
8. See <http://news.bbc.co.uk/1/hi/education/2510393.stm>
9. Specifically those such as deep ecology and ecofeminism that are critical of anthropocentric ways of valuing the nonhuman.
10. Not surprisingly there is also a corresponding need for environmental ethics to consider health, although I do not think this enclosing has happened to the same degree from this direction. Consider for example, the extensive literature on environmental racism and its health implications.
11. This might seem an incredible assertion given the presence of leading “animal rights” theorists such as Peter Singer within Bioethics. However, ironically despite this presence I would argue that animal ethics issues have to an extent fallen off the bioethics agenda as it has become narrowed down to medical ethics. Here I can declare an interest in that my participation in the Wellcome Trust Bioethics Today project (see footnote 3) involved compiling the Animal Ethics section of the web-site.
12. For a more recent well articulated outline of a Global Bioethics, see Widdows et al. (2003).
13. Consequently the reader should step back from interpreting my use of Potter as a clichéd attempt to recover wisdom by revisiting an old text. It is a fair assumption that the coining of a term does not grant ownership of a field, but simultaneously it ought to mean that those who currently practice bioethics familiarise themselves with his work.
14. Space limits constrain me here, but I would direct readers to the literature on the sociology of the body which has developed in the last 20 years.
15. I recognise that critiques of reductionism in science and medicine have been around now for some time and that moves have been made for more holistic medical treatments and non-dualistic conceptualisations.
16. Again I refer the reader to Plumwood’s work on dualism (1993).
17. Only hypothetical in the sense that we are not there yet. Research into human ageing e.g. telomere research is well underway.

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