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BEING POSITIVE ABOUT POSITIVE
GENETIC MANIPULATION

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SUMMARY

The aim of the article is to analyse which limitations should there be on the use of Assisted Reproductive Technologies (ART). We claim that the "principle of harm" requires that we are not justified in banning any harmless medical intervention, nor any harmless "biotechnological practice". The burden of the proof weighs on the opponents of the freedom of choice: in order to justify their denying access to ART, they are duty-bound to detect a harm. On these grounds, we address the question how far people should have the freedom to have control of phenotypic traits of children (features like hair eye and skin colour, general physique, intelligence or sporting ability) that are susceptible to technological or genetic manipulation. We inspect the main arguments against positive genetic manipulation, and we conclude that there is not good reason not to allow positive genetic manipulation of morally neutral or morally significant and advantageous characteristics.

What if any constraints or limitations should there be on the use of Assisted Reproductive Technologies (ART)? How far should people be free to choose not only their broad reproductive path but also its finer byways? That is, not only have the freedom to choose how and when and why to reproduce, but also to have control of other features of reproduction including phenotypic traits of children (features like hair eye and skin colour, general physique, intelligence or sporting ability and the like) that are susceptible to technological or genetic manipulation.

Key words: Positive genetic manipulation - Principle of harm - Assisted Reproductive Technologies (ART) - Reproductive freedom

Who has to justify what?

Let's start by asking when interventions in the reproductive process might be legitimate, and since such interventions are an instance of medical interventions more generally we must start with a prior question: When is the use of technology for medical and therapeutic purposes, morally justified? A first and obvious answer is that it is justified when it will do good and where any harmful side effects are small compared with the good and violate no one's rights. So, the good achieved, the importance of that good, and the fact that it is desired by those whom it benefits or (where patients cannot request or consent to its use) is in their best interests, are the important factors. The importance of medical interventions is proportional to the magnitude of the good that they will do and the use of the interventions will be ethical if they will do the good that the patients want, or when patients cannot request interventions, their use will be ethical if it does good and is in the patient's best interests.

Medical goods are often important because they protect life, lessen pain or suffering, restore mobility and so on. But note that there is an ambiguity in what we mean when we say that medical interventions are justified by the good that they do. There is ambiguity between the questions of whether the deployment of public resources for the achievement of the particular good on the one hand is justified and whether individuals are justified in accessing or others are justified in offering treatments on the other. The use of public resources may be justified if interventions do a good that ought to be done, although pressure on resources will always influence what is actually funded. But the individuals will be justified in using and others justified in providing treatments or interventions if they do no harm, or no significant harm, even if there are no moral imperatives for doing that harmless or marginally harmful thing.

Most elective medical procedures, including male circumcision or breast enhancements would be justifiable in this way. If the surgery is necessary to prevent or mitigate suffering then it will be justified both to do it and to spend public resources on it. But if it is purely a matter of personal preference - I'd like a larger breast or a modified penis, but my life is not made intol-

erable by my natural endowments - then interventions, while not required by morality and while not in the public interest, are not wrongful in any way. *However, if the individual wants an intervention that although only mildly harmful to her is immoral for independent reasons, the case is different. Having a racist slogan indelibly burnt into her forehead would be an example of this kind, in that it constitutes incitement to racial hatred, is against the public interest, and is arguably harmful, or a danger to others.*

But the opponents of freedom of choice in the use of reproductive biotechnologies often err in logic when they claim that a particular "biotechnological practice" should be banned on the grounds of evidence (supposing they have any) that it is morally bad. Generally speaking, there are certain morally bad actions that we want to see prohibited (such as murder) and other morally immoral actions that we prefer to retain as legitimate (such as making no attempt at dialogue with one's children); in the same way, we reason that some morally bad "biotechnological practices (or omissions)" need *not be banned*.

It is not enough to decry the moral evil of a "biotechnological practice" to prohibit it. Some "special justification" must be given to explain why the moral evil, *in any one given case*, is evil enough for it to be banned. But this "special justification" is not easy to find and few have made any coherent attempt to do so.

It is generally accepted that not all moral evils are evil enough to justify a ban, that only a *specific* type of moral evil carries this penalty - a decidedly effectual type of moral evil, the type that causes *harm*. In liberal democracies, the basic "principle of harm" reigns. It is this principle that governs *presumptive cases for liberty*; there is no such case when there is the certainty or grave risk that respecting freedom of action could be harmful to others. The fundamental factor - that it is always and in principle the party intent on prohibition or coercion that has to provide justification, not the advocate of leaving freedom of action - is well illustrated by Joel Feinberg at the start of his impressive four-volume work on *The Moral Limits of the Criminal Law*:

"Whenever a legislator is faced with a choice between imposing a legal duty on citizens or leaving them at liberty, other things being equal, he should

leave individuals free to make their own choices. Liberty should be the norm; coercion always needs some special justification¹.

*"It is legitimate for the state to prohibit conduct that causes serious private harm, or the unreasonable risk of such harm, or harm to important public institutions and practices. In short, state interference with a citizen's behavior tends to be morally justified when it is reasonably necessary (that is, when there are reasonable grounds for taking it to be necessary as well as effective) to prevent harm or the unreasonable risk of harm to parties other than the person interfered with."*²

The burden of proof therefore weighs on the opponents of freedom of choice in the use of reproductive biotechnologies. Since they seek to assert that a given "biotechnological practice" cannot be allowed, they are duty-bound to prove that it would cause specific "harm or the unreasonable risk of harm to parties other than the person interfered with". If, on the other hand, they insist that the specific practice should be prohibited *even though* – on their own admission – it does not imply harm or risk of harm to others, they still bear the burden of proof because they still have to supply "some special justification". And it must be convincing enough to support such a risky *prima facie* venture as the derogation or violation of the principle of harm. It can by no means be taken for granted that any "special justification" exists.

Any "special justification" for precluding the principle of harm must indeed be special. It has to be more than cogent and relevant (a *good* reason); it also has to be *special*. And it has to be so special as to advocate precluding the principle of harm *only in the case of "biotechnological practices" in the reproductive process, and not also for others that we would rather retain as liable to the principle of harm* (actions that we prefer to ban *only* if they cause harm to others). Consider the widely used argument stressing the "artificial nature" of "biotechnological practices" in the reproductive process. In its presumption, this argument ranges from "artificial" to conclusive "unacceptability" in a single unhindered step. Its primary lacuna is that it is intrinsically weak. One could reasonably ask *why* the "unnatural" characteristic of an action justifies banning it. And it is a question that should be asked be-

cause there is every suggestion that *prima facie* actions are prohibited or not according to their moral properties or not, independently of their "unnatural" characteristics or not. But even if we accept the sweeping identification of "unnatural" with "unacceptable", the justification is still not "special" enough and far too generic. It would work equally well against the practice of medicine in general since every medical intervention is undeniably "artificial", designed as it is to halt the progress of a disease considerably more "natural" than its cure. Advocates of this argument could render it more specific by declaring that the unacceptable crux of the matter is this artificial element's intrusion into human reproductive processes. But here, too, a series of medical practices are called into play. Assistance throughout pregnancy and birth, for example, would be discredited as would pharmaceutical therapies for the health of expectant mother and foetus alike, along with Caesarian sections, incubators and perhaps even the cutting of the umbilical cord. The point is that the "special justification" needed for any derogation of the principle of harm is at perennial risk of being used on a too vast scale. But, in restricting the spectrum to render justifications sufficiently "special", there is also the danger that its contents be forced into *ad hoc* and arbitrary "containers". And in this operation, the reasons would become much less "good", much less plausible and much less expendable as reasons.

Is there justification for denying access to artificial reproductive technology?

If we can identify interventions or their consequences that would be morally problematic of themselves we might know which traits it would be morally problematic to produce deliberately. The answer seems to be only those traits which would be harmful to the individual produced or harmful to others. Thus it would not be a morally problematic event if a boy rather than a girl were produced (or vice versa), and it would not be morally problematic if a child with a particular skin colour, hair colour, eye colour, or a range of useful abilities - sporting prowess, musical talent, intelligence and so on - were to be born or created. It could not be said that children with any of these features

would be born in a harmed condition or at any disadvantage whatsoever, and neither would it be plausible to claim that they would be in any way harmful or dangerous to others. No one has a reason to bemoan the birth of a child with any of these features or characteristics, nor would a child with such features have any ground for complaint to find herself a bonny, bouncing, blue-eyed, musically talented boy or a handsome, lithe, brown-eyed girl who is brilliant at football.

On the other hand we know very well that to choose to bring a child with disabilities into being is morally problematic and a child born permanently lame, or deaf or blind or with short life expectancy, would surely have grounds for complaint if any of these characteristics had been deliberately chosen by its parents or indeed anyone else. Why then do some people feel that designing children to be healthy, talented or to possess one harmless or beneficial feature rather than another - skin colour hair or eye colour or gender and so on - might somehow be wrong? If it is not wrong to wish for a bonny, bouncing, brown-eyed, intelligent baby girl with athletic potential and musical ability, in virtue of what might it be wrong to use technology to play fairy godmother to oneself and grant the wish that was parent to the thought?

Gender selection

To address the issue of the ethics of design in procreation let's turn to a very basic element of design, namely gender. First we need to distinguish between morally neutral and morally significant features or traits. A feature is morally neutral if its presence or absence is not morally significant. Thus it would not be *morally* better to have one colour of hair rather than another, nor for that matter to be one gender rather than another. On the other hand to have a disability or an advantage is not morally neutral. Of course the *manner of choosing* may be morally important. We might feel that abortion was not a reasonable way of determining such things; but if, for example, a litre of orange juice taken at a particular point in pregnancy could achieve the desired outcome, we doubt if any attempt to regulate its use would succeed or ought even to be attempted. At the moment a

reliable method of gender determination in humans does not exist, but it is always important to decide principles in advance of practicalities.

Objections to the idea of gender selection and the like often turn on two forms of 'slippery slope' argument. Either it is claimed that a pattern of gender preference will emerge which will constitute a sort of 'slap in the face' to the gender discriminated against, an insult and humiliation, like a piece of racist graffiti perhaps. Or, it is suggested that the pattern of preference will be such as to create severe imbalance in the population of society with harmful social consequences. Plainly these are very different sorts of outcome.

We should note that a pattern of preference for one gender amongst those opting for gender selection would not necessarily be evidence of sexist discrimination. There might be all sorts of respectable, non-prejudicial reasons for preferring one gender to another including just having a preference for sons or daughters. A preference for producing a child of a particular gender no more necessarily implies discrimination against members of the alternate gender than does choosing to marry a co-religionist, a compatriot or someone of the same race or even class implies discrimination against other religions, nations, races or classes. Of course, if a pattern of preference in favour of one gender were to emerge it might have either or both of the effects we have noted and would certainly be cause for concern. However it seems verging on hysteria simply to assume either that it would inevitably have these effects or that the effects would be so damaging as to warrant legislation to prevent the remotest risk of their occurring.

How can we guard against unacceptably bad effects of gender selection? One possible solution would be that a society like say the United Kingdom, of about 58 million people, could licence say one million procedures for gender selection over a ten year period, with options to revise the policy if severe imbalance seemed likely, and was likely to prove significantly damaging to individuals or society. We could then see what patterns of selection and motivation emerged. Even if all choices went one-way, the imbalance created would be relatively small before detec-

tion, and a halt could be called if this seemed justifiable. We doubt that the places allocated on such a programme would be taken up (it would of course be self-financing and would not be part of the public health care system). It must be remembered that those who opted for gender selection would (with current technology) have to be very circumspect about their procreation and use sperm selection or pre-implantation testing as the method. This would not, we guess, be wildly attractive or indeed particularly reliable. For the foreseeable future the take-up will also be limited by the availability of clinics offering the service. In any event, the way forward for a tolerant society respectful of autonomy, would surely be not to rush to legislation, but rather to licence the activity with regular monitoring and see whether anything so terrible that it required prohibitive legislation emerged.

Preventing Disease

If there are six pre-implantation embryos awaiting transfer, and diagnosis reveals that three have genetic diseases and three are normal, which three should be implanted? Only those who think that it is legitimate to choose to implant the three with genetic illness believe there is no obligation to prevent preventable disease by making decisions as to whether or not babies with particular diseases should be brought into existence (we assume, contrary to fact, that all have an equal chance of successful birth). Now assume that we can tell that three are normal and three will have longer, healthier lives than the average. Is there a moral reason to prefer those with better prospects for a long healthy life? We believe so, but here the decision is tighter. In any event it seems improbable to conclude that it would be *unethical* to prefer the embryos with expectation of a longer healthier life than is normal for humans. Now assume something else, that there are another three embryos with superior intelligence genetically diagnosed prior to implantation. Again, for what it's worth, we would opt to implant the more intelligent. We can understand those who would not, but again it seems improbable that it could be *unethical* to implant those with predicted higher than normal intelligence.

Now assume that a longer, healthier more intelligent existence could be achieved by safe genetic manipulation of embryos. If it would not be unethical to capitalise on the chance 'blessings' of nature, if these could be diagnosed before implantation, what would make it unethical to confer such blessings if we had the technology to do so?

What is the justification for refusing enhancements?

Many people have nothing against negative genetic manipulation, which is to say genetic interventions designed to correct defective genes, handicaps or diseases. But these same people may be decidedly hostile to positive genetic manipulation, or non-therapeutical interventions by which genes carrying certain characteristics according to parents' wishes are introduced to a genome that presents no anomalies. These characteristics can be categorized as 'morally neutral' (such as eye colour) and 'morally significant' (a disability or an advantage). It goes without saying that positive genetic manipulation to introduce morally significant, disadvantageous characteristics is unacceptable. But positive genetic manipulation involving morally neutral or morally significant and advantageous traits cannot be dismissed so easily. Let us first look at positive genetic manipulation to introduce advantageous characteristics. Why do so many people reject it out of hand?

Is the distinction between therapy and enhancement valid?

Those who accept only genetic manipulation for therapeutic ends but not for enhancement have to do more than illustrate why they consider the former morally good (but do they want to *allow it, or make it obligatory?*) and the latter morally bad (and so morally bad as to justify its prohibition). They will also have to show that they have valid grounds for presupposing that there is a net distinction between therapeutical and enhancing genetic interventions.

Common sense tells us there is a difference but, on analysis, this natural impression seems to drift into the realms of contrived semantics. If we could modify the genome of an embryo reducing the probability of cancer, cardiac arrest or Alzheimer's,

should we say we have introduced a "superman"-type characteristic – immunity to certain diseases – or that we have corrected a defective characteristic by eliminating liability to disease? Would these be enhancing or therapeutic interventions? If we could increase the power of memory, should we say we are introducing an additional "talent" (enhancement) or that we are (therapeutically) eliminating an obstacle or brake to talent, a barrier to the full use of the human faculties? Both are true. If it is argued that "human nature" has a talent for mathematics, then every genetic intervention to increase that talent is therapeutic, designed to liberate the human mind from the ball and chain of certain genetic blindspots. But if "human nature" is said to fall short on a talent for mathematics, then genetic interventions designed to improve on it would be seen as enhancements. In short, any distinction that is so sensitive to the niceties of definition is not a sound distinction. If genetic interventions can so easily be both cure (the *removal* of a harmful and intrusive genetic coating) and enhancement (the *addition* of advantageous genetic panelling), surely we would be better not to base our moral judgments on such a precarious distinction. Surely we should stop talking about such evanescent things as "human nature" and "the norm" and look only to the benefits or harm to individuals from genetic interventions or as a consequence of their *absence*. If we concede that the result of a given genetic intervention can only be a better memory or mind – with no harmful side effects – why should we hope that such an eventuality will never come to pass?

An offence to people with no talents?

It is not acceptable to say that generating more intelligent children by means of genetic manipulation is an offence to people not fortunate enough to have had this possibility. It is as unacceptable as saying that giving the children of today more and higher learning opportunities so that they will be more intelligent is an offence to people who grew up in a darker age with no possibility of education. That everything possible is done today to guarantee healthy food for children, as well as their emotional serenity and a future of peace, is not an offence to their grand-

parents who grew up during the Second World War with food rations, other deprivations and the risk of being killed in an air raid. Finding, sooner or later, a cure for cancer will not be an offence to people who have been killed by this disease in the past when there was no cure.

Restricting freedom?

Some arguments critical of positive genetic manipulation train the spotlight on the individual subjects themselves. Does the act of endowing someone with a particular talent at birth through positive genetic manipulation constitute a lack of respect for his or her freedom? On the surface, we could say that it does, in that the person did not ask us for the talent. But, by the same obvious token, nor did he ask us *not* to intervene and let him be born devoid of a talent that only we could have given him. It can reasonably be concluded that having the new technology at our disposal obliges us, indeed forces us to make a choice on behalf of another person who cannot decide for himself. In these circumstances, deciding what is reasonably *best for this person* cannot constitute a violation of his rights or freedom. In the same way, I do not trample on a person's freedom by bringing that person into the world (normally speaking, when existence is preferable to non-existence), or by saving him from death by drowning in a pond.

It must also be said, of course, that in being born with a talent, one is born deprived of the freedom to be deprived of that talent. And, in being born deprived of that talent, one is born deprived of the freedom to be endowed with that talent. For, it is always, *ceteris paribus*, better to have a talent than not (and hypothetically, *tertium non datur*), no one's freedom is damaged in the giving of it.

The right to be a product of chance?

Although we trample no one's freedom in endowing a talent, it could be argued that a person's *right to be a product of chance* is thus violated, his right to have genes determined according to chance, however less than ideal they may be. Interestingly, there is no similar claim to this alleged "right to be a product of

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chance" in any other sphere of human existence. Nowhere else is it said, and with such insistence, that decisions as morally important as one's whole genetic heritage be made on the basis of chance. On the contrary, such decisions should be made in the best possible way – no rational person wants to be governed by chance but by rational considerations and no one wants to be treated according to random principles but by their doctors but with the means offering the best prognosis.

As far as the composition of the genome of individuals brought into the world is concerned, things have proceeded "by chance" since time immemorial. But this does not mean that leaving things to "chance" is the best option especially now that it could soon be possible to pilot them in a conscious way. The fact remains that this appeal to the "right to be a product of chance" appears to be just a variation on the theme of the "goodness of all things natural", an argument we have already criticised.

Whether there is such a thing as chance or not – whether in the genetic lottery our destinies are determined *only* by fixed processes according to laws obscure to us in part – this thing we call "chance" is morally blindfolded. It works neither for us nor against us. It is hard to see how it could be immoral to replace a morally blind procedure with a morally directed one, one that works to the good, that minimises risk of harm, that carries no unpleasant side-effects.

Who are parents to claim the right to decide?

It could be said that parents do not have the right to make such decisions however sound the reasoning that it is better for my genome to be determined by my parents in view of what is good for me rather than by chance which is indifferent to what is good for me. But where are the reasons for this objection given that my parents intend to harm no one – never mind me – and act in accordance with what could reasonably be said to be my hypothetical preferences now (if I could express them) and my foreseeable preferences in the future (when I will be able to express them)?

Parents may well have "right to reproductive liberty or autonomy" excusing them from having to account for many of the

choices they make in the reproductive sphere. They are free to decide whether to generate me or not, with whom, when, where and for what reasons. Why, when the time comes, should they not also be free to choose how I will be if it harms no one?

It might be said that, in determining my genes and therefore my talent, my parents are influencing my destiny (and even my individuality) in a way that should not be allowed. It is undeniable, however, that my parents already indelibly engraved themselves on my personality when they gave me life and in a much more incisive way. They "forced" me to be born, to have them as my parents, to be born in a certain age, in a certain place, in a certain socio-economic condition, in a certain house with certain relatives. Why, if these "impositions" are not problematic, should the imposition of an advantageous gene be?

Given that my parents "ordained" that I be born and grow up in a certain country, it is impossible for me not to absorb that country's culture and language. My mother tongue will always be my mother tongue. Even if I grow up to learn other languages and speak them fluently, my mother tongue will always be the one given to me by my parents, for ever, whatever I do. It would seem, then, that just as no one would blame parents for providing this important inalterable element that is their child's mother tongue, no one should complain if they provide that child with an equally important and inalterable command of a talent. Even more untenable is the argument that parents benefit their child by ordaining him to speak one mother tongue as opposed to another; this, when the very real benefit that parents could bestow would be a talent that would always be better to have than not.

Another consideration is that parents impose their own genes on their children in the natural reproduction process. A child's genes are necessarily the genes of his parents. If, then, parents *already determine* their child's genes, why should they not be allowed to do this in more complete freedom for the child's maximum wellbeing in the future? Why should they be mere blind transmitters of genes in which they have had no say?

There is talk of the "right to an open future" for children.³ But if a child is endowed with an extra talent, his future cannot be said to be "closed". On the contrary, possessing a talent means

more freedom, a wider range of possibilities, more roads to choose from – all the roads already open to him without the talent plus the talent's own horizons. If I had been born with musical talent, I could well have done all that I do now but I could also have entered the professions connected to my talent. It's not that the talent *would have obliged me* to – I might well have ignored them and done something else (how many people, after all, "waste" their talents). Moreover, we know that many of the genes and the sets of genes responsible for a given talent are not *sufficient cause for the talent to emerge*. Genetic determinism is a false claim. Rather, phenotypical properties are determined by complex interactions of genes, genic matter and environmental elements⁴ (the same is true of phenotypical eventualities such as diseases⁵). This means that gene manipulation is even less liable to the charge of "closing the future" than we are sometimes inclined to think. Wherever there is the suspicion or the certainty that the genetic fostering of a talent will clash with an existing innate or phenotypical talent, inhibiting it⁶, the discussion becomes more complex and it is the task of genetics to develop and elucidate on it. But few talents present this problem and, even if they did, there is no reason why it should be immoral to allow parents to choose among alternative "ranges" providing they are the best of the type and no one of them is inferior.

It is truly difficult to imagine why we should stop parents endowing their children with the best of capacities through genetic manipulation when this is their acknowledged right in the more traditional form of education. No one would blame parents for looking to education to empower their children's minds or mathematical abilities. On the contrary, the State intervenes when parents fail to ensure their children's education and forces them to comply. Why blame parents for looking to genetics to do the same job?

Morally neutral characteristic

Imagine that a couple would like a child with blue eyes. Given that the couple has few or no possibilities of having a child with blue eyes in the natural way, they apply for genetic intervention. Imagine that we have the technology to modify the un-

born's eye color with no risk of side-effects. Why should we stop this couple from going ahead?

If we see "having blue eyes" as morally neutral, then we will also accept that "having blue eyes" is no better or worse than having black eyes or brown. There can be no argument there. If parents arrange for their child to have blue eyes as opposed to black or brown, they are not harming the child (nor are they benefitting him). In keeping with the 'principle of harm', we ought to conclude that there is no justification for prohibiting an act of free choice of no harm to anyone. The child's freedom of choice would be crushed only if he had the faculty to choose the colour of his eyes and if, in that case, his parents were still to decide for him. But the child cannot choose and is forced to submit. It makes no difference to him whether the colour of his eyes has been ordained by genetic mechanisms external to him or by parental decisions external to him. If parents opt to do something which leaves everyone else (including their child) indifferent, we should allow them to do it. Moreover from an utilitarian point of view, to grant freedom of action in this case is undoubtedly the happier option because no one emerges from it worse off (frustrated) and at least two individuals – the parents – are better off (satisfied).

In general, nearly all the arguments we have presented so far against banning genetic manipulation in view of morally significant and advantageous characteristics can also be applied to uphold genetic manipulation in view of morally neutral characteristics. The principle is the same: If no harm is caused to anyone (and, indeed, there is a benefit for someone other than the agent), there is no reason to prohibit the manipulation.

It is not hard to dismantle the objection that parents should not be allowed to condition the life of their child irreparably on a whim or fancy. If the "irreparable conditioning" is harmful, then parents should be stopped from carrying it out; but if the "irreparable conditioning" is not harmful, there is no reason to prohibit it especially when it is *impossible to stop parents "irreparably conditioning" the lives of their children* in a plethora of other ways. We have presented a long list of conditioning factors which are metaphysically irremovable but morally acceptable,

the first being the "obligation to be born". By imposing their genes and often also their physical features, parents obviously and "irreparably condition" their children both genetically and phenotypically. In the light of these obvious facts, the broadsides being launched against genetic manipulation appear decidedly off-target. This was Monsignor Elio Sgreccia's clap of thunder against genetic manipulation:

*"They seek to impose a physical form from which the individual will never be free. They exploit the body. It is a tremendous form of slavery from which there is no way out"*⁷.

Surely every individual without exception – including all those who are procreated naturally – is given a "physical form" which he or she did not choose but which was "imposed". No argument is worth our attention that, in decreeing the immorality of genetic manipulation, ends up decreeing the immorality of all procreation and particularly of the natural kind, the very one they label as "good", versus the "bad" involving genetic manipulation.

A factor for some is that the child for whom two blue eyes have been procured by genetic intervention may one day find out and suffer for having been "designed around a table" and that this suffering is therefore harm caused by human agency. But this would mean that we all suffer on discovering that we did not come by our names "naturally", that they were deliberately chosen by our parents. And yet no one suffers because they were given the name their parents preferred. Conversely, we would be upset to learn that our parents had casually picked a name out of a hat for us or a name they themselves did not particularly like. All children who are "wanted" are "planned". Parents cannot wish to have as their child *the specific person* that that child will become because they have no way of knowing in advance what personal identity he or she will have. They are therefore obliged to relate to an individual who does not yet have a psychological profile or personal traits. They have to "sit around a table and plan" the inauguration of this relationship (the birth) and the assignation of some vital initial characteristics (a name, a first baggage of biological elements and background). This they have to do independently of *who the child is*,

the child who in many respects *is still nobody at all*. These decisions are made by parents in abstract fashion – "what's best for my child, *whoever he is*". If the parents would like a daughter called 'Agatha', then that is the name they will give to any daughter they may have. If parents want their daughter to be fed on a certain brand of babyfood, then they will feed any daughter they may have on that brand. Thus, it is more than acceptable that, if their preference is for a daughter with blue eyes, then they will manipulate the genes of any daughter they may be about to have; this, at the risk of giving that daughter, as an adult, the mistaken impression of "disrespectful" forward planning. Many children after all, are not genetically manipulated but have been "planned" in much more morally deplorable – though accepted – ways. Cases in point are children born to be heirs to financial empires, or to carry on the family business or name. Then there are parents whose one desire is to have a doctor for a son, or a lawyer. There are equally many children who were "not planned" – all of them born by mistake – who, if they knew the truth, would suffer at least as much as their counterparts with programmed eye colour are said to suffer. Yet, no one has ever thought to *prohibit* parents from bringing children into the world that they had not particularly wanted at the moment of conception.

Some argue that the genetic determination of eye color should be banned on the grounds that we would all turn out to be the same, "with the same blue eyes". The first objection here is that no one would ever dream of depriving parents of their free choice of name for their children on the grounds that we would all risk having one of the two or three most common names (John, Mary, Maria, Francesco). If this were to happen, it would be preferable to retain freedom as opposed to "unharmful variety". A second point is that, if we really were to generate homogeneity, corrective mechanisms would automatically kick in to restore the state of variety. Thirdly, homogeneity is no real risk because of the vast range of different tastes. Numerous Greeks, for example – though not all – might prefer blue eyes but equally numerous Swedes – though not all – might rather have black.

There will be some who will want a blue-eyed child for frivolous or even disreputable reasons but here we have the case of an action which will still have to be allowed, however morally bad – like marrying for money, like off-loading one's ambitions on one's children, like falling out with the neighbours.

One last objection to the appeal to the "right to be a product of chance" (and shelving for the moment the problems shrouding this appeal as we analysed them), is that in some circumstances the very *absence* of genetic manipulation is a violation of this alleged right to be a product of chance. If both parents have blue eyes, they are *sure* to have a child with blue eyes since the gene specifying this colour of eyes is recessive and must be doubly present. If we were really to take the right to be a product of chance on board, then we would have to *oblige* all couples who are *bound* to have a blue-eyed child to affect a genetic manipulation enhancing the element of chance. Otherwise, their offspring would be deprived of this right. But since we all agree that the desire of these couples *not* to recur to genetic manipulation should be respected, however much in violation of the child's "right to be a product of chance", then the desire of other couples (not both furnished with blue eyes) to do so should be equally respected, however much this, too, violates this specific "right" of their children.

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This paper draws on work first published by John Harris, in his "Liberation in Reproduction" in Ellie Lee Ed. *Designer Babies – Where Should We Draw The Line?*, Hodder and Stoughton, London, 2001.

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