Equality and selection for existence

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Abstract

It is argued that the policy of excluding from further life some human gametes and pre-embryos as "unfit" for existence is not at odds with a defensible idea of human equality. Such an idea must be compatible with the obvious fact that the "functional" value of humans differs, that their "use" to themselves and others differs. A defensible idea of human equality is instead grounded in the fact that as this functional difference is genetically determined, it is nothing which makes humans deserve or be worthy of being better or worse off. Rather, nobody is worth a better life than anyone else. This idea of equality is, however, not applicable to gametes and pre-embryos, since they are not human beings, but something out of which human beings develop.

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1. Introduction

To an increasing degree, it is becoming possible to diagnose genetically determined diseases in gametes before fertilisation or in embryos before implantation, ie, pre-embryos. This diagnostic knowledge is important because the techniques of in vitro fertilisation (IVF) use gametes and pre-embryos. Yet it raises ethical problems. In some cases, genetic therapy may offer a cure for the diseases diagnosed. In this event, the situation is ethically no more problematic than the one of ordinary somatic treatment. There is the difference, though, that genetic therapy is not practised on human beings, in spite of the fact that these organisms are (genetically) human. (This is so for reasons I will expound in the next section). Rather, this genetic therapy, if successful, means that some of us, who are about to *begin* to exist, will exist with better life prospects. Still, it leaves intact the identity of human beings who will exist, as somatic therapy leaves intact the identity of those existing.

However, the genetic diagnosis could also be employed to exclude from further use those preimplantative organisms carrying genetic diseases, that is, to exclude such gametes from use for fertilisation and such pre-embryos from use for implantation. In contrast to the genetic therapy

just considered, this practice may be held to be ethically suspect because it is incompatible with all of us humans being of equal value or having an equal right to life. When identity is not altered, to improve — by means of genetic therapy or whatever — the quality of life of human beings who will begin to exist, so that it may be expected to be on a level with what is normal, seems to be precisely what the ideal of human equality demands. Contrariwise, due to the impact on identity, to prevent some human beings from coming into existence because they will have certain diseases, seems to collide head on with the ideal of human equality. For this policy appears committed to the view that these humans do not have the same value, or right to life, as other humans who are permitted to commence their existence.

Furthermore, by being a violation of human equality, will not such a practice of dividing pre-implantative organisms into those "fit" and "unfit" for existence have the bad effect of breeding contempt and greater reluctance to assist the "unfit" and disabled who will nevertheless exist? (Some such will inevitably exist, for some genetically determined diseases will be missed and some severe diseases and handicaps are principally environmentally rather than genetically determined.) Or is it rather the case that this practice is in line with a tenable interpretation of human equality and that it will not have this bad effect on attitudes to the handicapped and ill if this is properly understood? I shall argue for an affirmative answer.

2. Why we have never been pre-embryos

The term "pre-embryo" will henceforth designate the organisms existing at the pre-implantative stage, whether they be gametes existing before conception or zygotes existing after it. Despite their obvious differences, I lump together gametes and zygotes because they are the organisms handled by IVF and their moral status is on a par. The latter is of course vehemently denied by those who believe that the human beings to which we are identical begin to exist and acquire a right to life at conception. I think, however, that this view has counterintuitive consequences which indicate that our identity does not stretch backward

beyond implantation (also brought out, for example by some papers in reference one).¹

What exists at the completion of the roughly 24-hour-long process of conception is a cell which — in contrast to the gametes individually — is genetically like a human being. There is then a series of cell divisions: of one cell into two, two into four, etc. Waiving the complication that some of the material of the original cell goes to make up the placenta and amniotic sac instead of the fetus, suppose it were identical to a human being identical to one of us. Then this human being divides into two, provided that what exists after division is nothing but a pair of cells. The original cell/human being would thereby cease to exist, for it would be arbitrary to identify the original cell/human being with any one of the two cells existing after the division, and absurd to identify it with both, since they are evidently distinct.

It might be objected that what exist(s) after division is not simply a pair of cells, but rather a unified two-celled organism which could be identical to the original single-celled organism. But this unity is gainsaid by the fact that each of the two cells might develop into what is clearly a human being distinct from the other. This is the origin of monozygotic twins.

So, division plausibly causes the original cell to cease to exist. If it were a human being identical to one of us, such a being would cease to exist at this early stage, and that seems odd. In case we believe, in addition, that a human being has a right to life from the beginning of its existence, there is the further difficulty that we would have reason to prevent the twinning from occurring, since it destroys a being with a right to life. This is strongly counterintuitive.

Therefore, it is better to adopt the view that we begin to exist *no earlier* than at the stage of implantation. At this stage a unified animal organism begins to develop and the possibility of monozygotic twinning is ruled out. (It does not matter for present purposes if it is held that we begin to exist *later*, say, when this organism acquires the first traces of consciousness.)

I would just like it to be clear that killing a pre-embryo is not a matter of killing anyone of us or interrupting the life or existence of anyone of us. It is instead a matter of preventing one of us from *beginning* to exist. Thus, even if all of us from the beginning of our life have a right to go on living, this interference would not infringe this right. Actually, I do not believe that there is any ethically deeper difference between interrupting our existence immediately after it has begun — if this is before the emergence of consciousness — and not permitting us to begin to exist. That is, I do not

believe that the coming into existence of human beings identical to us makes any change that significantly alters my conclusions. But this raises controversies — about the killing of human beings, etc — into which I cannot here enter. So, I will here confine myself to action taken on pre-embryos, say, in the course of IVF.

3. Our functional value

There is, indeed, a sense in which the value of the human beings who have serious diseases is not equal to, but lower than, the value of normal human beings. Human beings have features by virtue of which they can contribute more or less to the value their lives have for themselves and to the value the lives of others have for these others. Call this value that a life has for the (conscious) being who leads it, its *reflexive* value. Many disabling diseases will greatly reduce the contributions their victims are capable of making both to the reflexive value of their own lives and to the reflexive value of the lives of others. It may greatly reduce the reflexive value of their lives by causing them suffering and early death, and, due to this, it may make these individuals unable to contribute much to the reflexive value of the lives of others. Other disabling diseases — perhaps like Down's syndrome — may less reduce the reflexive value of the diseased people's own lives than their contribution to the reflexive value of the lives of others. These diseases may allow those afflicted, with some extra assistance, to lead lives that are reasonably good for them, but will rob them of the power to assist others much in return. Finally, it is possible that there are conditions — perhaps psychiatric illnesses — which allow individuals to make great contributions to the reflexive life-value of others — perhaps by creating artistic masterpieces — but which leave their subjects in incurable, miserable states of mind.

There are different theories of how the reflexive value of a life is to be understood. According to one, it roughly consists in *desire fulfilment*: the fulfilment of one's own desires in the course of one's life constitutes its reflexive value, its value for oneself. Let us for the sake of concreteness adopt this account (though it is in dire need of refinement). Then the value of human beings, for the reflexive value of their own lives and for the reflexive value of the lives of others, will be determined by the extent to which they — with their psychological or physical features — contribute to the fulfilment of their own desires and to the fulfilment of the desires of others, respectively. We may call this the *functional* value of individuals. There is the functional value individuals have for the reflexive value of their own life, their functional value for

the reflexive value of the lives of others, and their functional value overall which is the sum of these values. We may abbreviate this to functional value we have for ourselves, for others and overall.

Functional value is a kind of value we share with artefacts. Artefacts, like cars and computers, are designed to carry out certain functions. Their functional value is determined by the extent to which they succeed in this. It may be objected that it is gross and cynical to liken us to artefacts which are *means* or *instruments* to certain ends. This seems to run counter to Immanuel Kant's famous Categorical Imperative: "Act in such a way that you always treat humanity, whether in your own person or in the person of any other, never simply as a means, but always at the same time as an end".²

However, I am not proposing that, like artefacts, we should be regarded *simply* as means. I do not deny that there is the important difference between us and artefacts that *we ourselves* can normally set up some of the purposes or ends for which our organisms, with their psychological and physical assets, can be used. Thus, the resources of our organisms also enable us to set up our own ends; they do not only provide us with more or less effective means to be used to pursue ends which others set up. These organisms have high functional value for us if they enable us to entertain many ends and to fulfil them, ie, if they enable us to live lives of high reflexive value. If they enable us to fulfil many ends others have set up, they have a high functional value for these others, for the reflexive value of their lives, as well.

When others utilise the functional value we have for them, however, they should bear in mind that, in contrast to artefacts, we also have functional value for ourselves, since we are capable of leading lives with reflexive value. They should take care not to (mis)use us in ways that have a detrimental effect on the functional value we can have for ourselves, ie, on our capacity to make our own lives reflexively valuable by furthering our own ends.

4. Human inequality regarding functional value

In view of the great human variation in respect of health and other assets, it would be truly miraculous if the functional value, for ourselves and for others, of all of us human beings was more or less equal. In all probability it varies greatly, and a primary challenge to egalitarianism is to provide an idea of human equality which is tenable in the light of this variation. Indeed, we seem so far removed from all humans having an equal

functional value that it seems hard to find *any* feature bearing on functional value that all humans share to an equal degree.

Sometimes it is suggested that all human beings have an equal value by virtue of simply having the property of being human beings or belonging to the species *homo sapiens*. But this will obviously not do if "equal value" means "equal functional value". For the property of being a member of the human species does not in itself contribute to making either one's own life or the lives of others reflexively better. For instance, the life of an anencephalic human in fact is not made reflexively better than the life of an anencephalic baby chimpanzee by the mere fact that the former possesses this property. Since neither of these beings is equipped with consciousness, neither their lives nor anything else can be of value for either of them.

According to some religions, all humans have immortal souls. This equipment would undoubtedly have great positive functional value on condition that the eternal life it permits us to live is reflexively good for us. But, apart from general reasons for questioning the existence of such souls, there is a reason for disputing the relevance of their existence in the present context. Since these souls are immortal, they must be capable of existing independently of our organisms, for example, after these organisms have died and decomposed. But if so, it is curious that the *beginning* of the existence of souls should be thought to depend on what human organisms begin to exist.

Moreover, even if there were some property, underlying functional value, that all humans shared to the same degree, this would not automatically cancel differences as regards other evaluatively relevant properties. So, the existence of some such property would not be sufficient to provide us with an *equal* functional value unless, like an immortal soul might do, it made such an immense contribution to our functional value that everything else dwindled into insignificance.

5. A human right to life?

The conclusion so far is, then, that if we understand value as functional value the egalitarian claim that all humans are of equal value is evidently false. The functional value of humans plainly differs. Suppose we think it reasonable to endorse a *principle of utility* roughly to the effect that an outcome is better, other things being equal, if there are more individuals leading lives of greater reflexive value or welfare. Then we would be in a position to justify precluding the further development of pre-embryos carrying genetic data.

eases that would seriously impair the functional value of the human beings developing out of them, for impaired functional value goes with low reflexive value. We need not bother about whether this practice is compatible with human equality until we have found an interpretation of it which is sustainable in face of the conspicuous variation of the functional value of human beings.

At this point, it might be wondered whether appeal could not be made to the traditional idea of taking human equality to amount to all humans sharing the same fundamental *rights*, such as the rights to life and liberty. I think we may straightaway put aside the right to liberty, since this is obviously a right that some human beings, for example, anencephalic infants, cannot intelligibly be said to have. Furthermore, some humans, for example, those gravely mentally handicapped, arguably have this right only to a reduced extent. So, we do better to concentrate on the right to life.

Now, to begin with, it should be remembered that the practice of excluding some pre-embryos from further existence does not infringe any (real or alleged) right of *existing or living* human beings to *continue* to live. For, as pointed out in section 2, pre-embryos are not human beings. What would be pertinent to present purposes is instead a right of human beings that it is empirically possible for us to bring to life to be brought to life by us, and a correlative duty of ours to bring them to life. If all possible human beings equally have a right to begin to live, it would undoubtedly be violated by the practice of selecting only some out of a class of pre-embryos for development into human beings.

It should be noticed, however, that even if possible humans were equipped with such a right, a theory of rights itself could provide us with a moral reason not to cause them to exist. Normally, when a right is fulfilled, the number of rights to be fulfilled is reduced. But this is not so in the present case. For the more humans we cause to exist, the greater the number of possible humans which the existing ones in their turn could beget, ie, the greater the number of holders of an unfulfilled right to begin to live. To reduce this number, we instead have to employ the opposite strategy of creating as few humans as possible (or create infertile ones)! If no humans exist, none are possible. For this reason it is unclear whether, given the assumption that all possible humans have a right to begin to live, we have a duty to let them do so. But the notion of such a right without a correlative duty seems dubious.

This leaves us with the proposal that human equality consists in all living humans equally having a right to continued life. As already remarked, however, this proposal does not forbid the exclud-

ing of some pre-embryos from further life for the reason that they are genetically defective, since they are not humans having this right. Furthermore, this proposal requires that "life" be taken in a purely biological sense. (An organism, be it an animal or plant, is alive in this sense if "vegetative" processes, such as its metabolism, operate.) Otherwise, it would be a right that some living human beings, such as anencephalic infants and other permanently unconscious members of our species, cannot have. If it were a right to lead a life that is (reflexively) good for you, it would be a right that only humans having a capacity for consciousness could have, since only for beings with this capacity can anything be good (or bad).

But, clearly, equal rights to continued biological life is far too jejune to be a satisfactory ideal of social equality. Such an egalitarian ideal must rather amount to something like: all humans (who have consciousness and thus a capacity to lead lives that have value for them) have a right to lead lives whose reflexive value is as equal as possible. As noted, this is not a right that all biologically living (as opposed to conscious) humans can have. There is then something of a dilemma here: either a right will not apply strictly speaking to all members of the human species or its content will be too meagre to amount to a substantial egalitarian ideal. I propose now to look for a foundation for a substantial egalitarian ideal, though it will leave out some humans.

6. A basis for equality

Return to the (varying) functional value of human beings. Since we are here concerned with characteristics that are genetically determined, it should be noted that, at least to the extent that our functional value is genetically determined, it is nothing for which we are *responsible*. We cannot be responsible for those unalterable features of ours that we acquired before we were able to act responsibly (an ability which presupposes such abilities as that of intending or foreseeing outcomes). Now, to the extent that our functional value is the result of factors for which we are not responsible, but which are a matter of "genetic (good or bad) luck", it is arguably not *just* or *fair* that, due to variations in respect of this value, some lead lives that are reflexively better than are the lives of others. For instance, it cannot be just that some receive great financial rewards that make them reflexively much better off than most others in return for their high functional value for others, if this high functional value is merely the outcome of their being lucky in having been endowed with "good" genes. How could it be just to reward

someone for having been lucky, and to punish someone else for having been unlucky?

Yet this is what lies behind talk of some people being, by virtue of their positive functional value for others, *deserving* or *being worth* rewarding, whereas others, by virtue of their negative functional value for others, *deserving* or *being worth* punishing. Talk of some deserving more of what is (reflexively) good for them than others implies that it is just that they receive this. Similarly, behind the idea that some have a *natural right* or are *entitled* to the reflexively good lives they have created for themselves, by means of their natural talents, lies the assumption that it is just that they enjoy the products of talents by virtue of which they have functional value for themselves.

This conception of justice, as getting what you deserve or are entitled to, in conjunction with the varying functional value of human beings, then leads to it being just that some of us lead lives that are reflexively better than the lives of others. On the other hand, if, as I suggest, we reject this notion that distribution of welfare, or of what makes life reflexively good, in accordance with the functional value of individuals is what makes a distribution just, because this functional value is due to circumstances beyond their responsibility, we may claim that justice requires that all lead lives of equal reflexive value. For it is unjust that some are reflexively better off than others if there is no ground — such as deserts or entitlements — that can make this just. So, on the assumption that there is no such ground, justice requires that all are equally well off.

Now, I have not argued that there is no feature of human beings that can render it just that some of them have lives that are reflexively better. I have only suggested that in so far as our features are genetically determined, they cannot render this just because they are then doubtlessly beyond our responsibility. Frankly, I believe that in the end everything about us is beyond our responsibility: if it is not the outcome of genetic factors, it is the outcome of environmental ones ultimately outside our responsibility. Hence, I believe that it is not just that anybody leads a reflexively better life than anybody else does or, in other words, that nobody is worth a reflexively better life than anyone else. It would, however, lead too far afield to argue this here (but see reference three).³ However, having realised along which lines an egalitarian ideal can be established, we may for the purposes at hand assume that equality in this sense has been established, to see what follows with respect to selection for existence.

7. Selection not contrary to equality

Like the right to life examined above, this egalitarian principle cannot apply to possible human beings. It cannot sensibly prescribe that we bring human beings into existence in order to spread the reflexive goodness of life over more recipients. For, as we have seen, it is not the case that the more humans we let be born to a reflexively worthwhile life, the greater the proportion of possible humans who are given the benefit of such a life, since the more humans we create, the greater the number of possible ones they could produce. As the number of human beings that actually exist can possibly create grows exponentially with the growth of actual humans, the creation of new humans leading worthwhile lives cannot promote equality by increasing their number in proportion to the humans that it is then possible for them to create. For the increase of the latter number is steeper than that of the former.

If, contrary to fact, we could appeal to equality at this point, it would recommend us not to let *anyone* be born to a reflexively good life, since there is inevitably a vast number of possible beings who cannot partake of such a life. So, it would be a breach of equality to select relatively few for their existence. This would be so even if we let chance or the course of nature decide who will exist, for the more equal outcome is still the one in which nobody is better off by existing, but all are non-existent.

Thus, we have arrived at an answer to our main question: selecting “healthy” pre-embryos for further development into humans in preference to ones who carry genetic diseases is *not* contrary to a tenable idea of human equality. This is of course compatible with the view that such a selection of embryos just after implantation goes against this idea. However, as I implied in section 2 when expressing the opinion that in itself the coming into existence of human beings identical to us is not ethically significant, I reject the latter view, too. The reason for this is that I believe the principle of equality to apply only to conscious beings who already are able to enjoy lives that possess reflexive value for them. For a state is (un)equal regarding welfare only if it does (not) spread existing welfare equally over all those who can fare well.

But even if the principle of equality applies to the organisms subject to the selection policy, selection may be morally justifiable. For, evidently, this principle cannot be our only moral principle. We surely want to be able to hold that equality at a higher level of welfare is better than equality at a lower one, so that it is better to

improve the inequality of a state by raising the welfare of the worse-off than by lowering the welfare of the better-off.

Note that this principle leaves us free to say that equality at a higher level is always better, for unlike the idea that justice consists in receiving that to which you are entitled or deserve, it does not specify for us individually a level on which it is just to be, like the level on which we receive what we deserve or are entitled to. When the concepts of desert and of entitlement, and of anything else that could make it just that anyone is better off, are denied application, justice cannot consist in such *intra*-personal relationships, but turns into a purely *inter*-personal matter of all being on the same level of welfare, whatever that is.

This makes it plausible to conjugate this principle of equality with something like the principle of utility mentioned in section 5, thereby arriving at the view that it is best if as many as possible are as equally well off as possible on as *high* a level as possible. The application of this principle requires us to balance the aspects of equality and utility against each other, and so it may in some cases be hard to ascertain whether one outcome is better than another. None the less, it is clear that this principle could morally justify the excluding from further life organisms carrying genetic diseases even when this is contrary to equality, provided the gains in terms of utility are large enough. (Note that it *morally justifies* this practice without making it *just*, since the justification appeals to utility rather than to justice as equality.)

8. Social consequences of a policy of selection

Now, even if we succeed in identifying the genes underlying some serious diseases and handicaps, and exclude from further life pre-embryos carrying them, the health conditions of people will still differ, and they will for that reason lead lives of unequal reflexive value. This will be because some genes of this kind will slip through, despite our efforts, but also because heritage is not the only cause of diseases and handicaps: environmental influence is also important, and sometimes — for example, in the case of accidents — even the most important factor.

But if we have adopted a policy of excluding from further life pre-embryos carrying diseases, will this not breed a condescending attitude, and perhaps even contempt, towards those who are less able? It should not, for although it must be conceded that their functional value is lower, this is nothing for which they are responsible. The whole rationale behind the above vindication of

equality is that, since we are not responsible for our high or low functional value, we deserve nothing and are not entitled to anything by virtue of it. So, it is irrational to be proud of oneself, or take oneself to be worth more of what is reflexively good, because of one's high functional value, and to be contemptuous of those of low functional value and think that they are worth less reflexively good lives. For nobody deserves to lead a life that is reflexively better than are the lives of others.

Justice then demands that by means like, say, taxation resources be transferred from the better-off to the worse-off, to the degree that equality of welfare results. It might be objected that this will be felt to be too taxing by the better-off. If those with the socially more useful talents are deprived of incentives in the form of opportunities for greater personal welfare, or reflexively better lives, they will not make full use of their talents. As a result, society at large will be less prosperous.

This is probably true because most people firmly believe in deserts and entitlements, and selfishly insist upon that which they think they deserve or are entitled to — and, indeed, in many cases a lot more. If so, it may be morally justifiable to reward those who make the socially most useful contributions with a higher level of welfare, just as it may be morally justifiable to punish those who act in socially harmful ways. Again, we have an example of a situation in which a gain in respect of utility overall is so great that it justifies a certain amount of unjust inequality.

The Kantian dictum earlier considered permits that people are treated as means, though not *simply* as means. The policy I am now proposing is that it is permissible to give some more (or less) than their equal share of reflexive value in so far as they are considered as means to the utilitarian end of maximising the total quantity of such value. Rewarding, by letting them live lives of greater reflexive value, those who make useful contributions and punishing, by allowing them less reflexive value, those whose behaviour is harmful may well be justifiable in utilitarian terms. But, in so far as we are considered as ends in ourselves, nobody should be (reflexively) better off than anyone else, since the deserts or entitlements that could make this just do not exist (and all should be better rather than worse off, according to the principle of utility).

It may be possible to make people less prone to insist on their deserts and entitlements, or less selfish. But as long as human motivation is what it appears to be, the necessity of preventing the development of the genetically most defective embryos stands out starkly. If this is not done, implementing the ideal of equality will impose

even greater burdens on those with higher functional value. The implementation of this ideal will then look even less accomplishable than it would if this practice were adopted. Thus, this policy paves the way for equality instead of counteracting it.

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References

- 1 Singer P, Kuhse H, Buckle S, Dawson K, Kasimba P, eds. *Embryo experimentation*. Cambridge: Cambridge University Press, 1990.
- 2 Paton HJ. *The moral law*. London: Hutchinson, 1948, a translation and commentary of Kant I. *Grundlegung zur metaphysik der sitten*.
- 3 Persson I. The groundlessness of natural rights. *Utilitas* 1994; 9-24.

News and notes

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