

The Abolition of Man
or
Reflections on reductionism
with special reference to eugenics

by

Peter S. Williams

‘What will happen when our technological achievements give us Promethean powers
– powers once thought the exclusive province of God – just when most of those in
charge have ceased to believe in anyone or anything like God?’
- George Gilder and Jay W. Richards¹

C.S. Lewis’ *The Abolition of Man* (first published in 1943) is one of the most prescient books of the twentieth century, ranking alongside Aldous Huxley’s *Brave New World* in its continuing relevance to life in the twenty-first century. Indeed, Lewis’ thinking is all too relevant to spend this paper merely *appreciating* his thoughts and arguments. The best way to appreciate Lewis’ thinking is to *apply* it to the contemporary world, thinking *through* Lewis rather than merely thinking about him. Therefore, this paper will build upon Lewis’ insights into reductionism and ‘the abolition of man’ reductionism threatens as a vantage point from which to critique the contemporary debate about genetic engineering as exemplified by the writings of Gregory Stock and Francis Fukuyama.

The Astonishing Hypothesis

Francis Crick, co-discoverer of the helical shape of the DNA molecule, gives voice to the culturally dominant philosophy of our age when he advances an *Astonishing Hypothesis*:

your joys and your sorrows, your memories and your ambitions, your sense of personal identity and free will, are in fact no more than the behaviour of a vast assembly of nerve cells and their assorted molecules. As Lewis Carroll’s Alice might have phrased it: “You’re nothing but a pack of neurons.”²

Crick’s hypothesis is advanced in the name of science and in opposition to the religious view ‘that some kind of spirit exists that persists after one’s bodily death and, to some degree, embodies the essence of that human being.’³ But can science disprove the existence of the human spirit (which, by definition, is scientifically undetectable in itself)? And can it do so without having to pay any attention to the queen of sciences, theology, or her handmaiden philosophy? After all, how much store should we set by a hypothesis advanced by nothing but a pack of neurons?

Crick’s hypothesis is *reductionistic* in that it offers an explanation of what it is to be a human being that *reduces* human nature from the traditional but complex belief that man is a purposefully constructed combination of mind and matter made by God in the image of God, to the untraditional but simple belief that man is, like everything else, ‘nothing but’ an unintended arrangement of matter. The driving force

behind Crick's reductionism is the assumption of a naturalistic worldview that only admits one explanatory category (the material) to which all reality must therefore be reduced. As C.S. Lewis explains in *Miracles*:

What the Naturalist believes is that the ultimate Fact, the thing you can't get behind, is a vast process in space and time which is *going on of its own accord*. Inside that total system every particular event (such as your sitting reading this book) happens because some other event has happened... The Naturalist believes that a great process... exists 'on its own' in space and time, and that nothing else exists – what we call particular things and events being only the parts into which we analyse the great process or the shapes which that process takes at given moments and given points in space. This single, total reality he calls Nature.⁴

In advancing his astonishingly reductionistic hypothesis, Crick is facilitating the terminal chapter of what Lewis described as 'that great movement of internalisation and that consequent aggrandisement of man and dissection of the outer universe, in which the psychological history of the West has so largely consisted.'⁵ It is more important than ever to understand that Crick's widely shared 'astonishing hypothesis' is the inevitable result of an intellectual habit that defines metaphysical naturalism, that this habit is a bad habit, and that the continuation of this bad habit promises to close the book on mankind for good. Lewis warned that this habit, where reductionism is applied to values ('values are nothing but subjective beliefs or feelings in the human mind') and then to human nature ('the human mind is nothing but neurons'), has predictable results: 'The Abolition of Man'.

The Habit of Reductionism

Lewis examined reductionism in 'The Empty Universe'⁶:

At the outset the universe appears packed with will, intelligence, life and positive qualities; every tree is a nymph and every planet a god. Man himself is akin to the gods. The advance of knowledge gradually empties this rich and genial universe: first of its gods, then of its colours, smells, sounds and tastes, finally of solidity itself as solidity was originally imagined. As these items are taken from the world, they are transferred to the subjective side of the account: classified as our sensations, thoughts, images or emotions. The Subject becomes gorged, inflated, at the expense of the Object.⁷

This is what Lewis means by 'that great movement of internalisation and that consequent aggrandisement of man and dissection of the outer universe...'⁸ However, said Lewis, the habit of reductionism doesn't stop with the outer universe: 'The same method which emptied the world now proceeds to empty ourselves. The masters of the method soon announce that we were just as mistaken (and mistaken in much the same way) when we attributed "souls"... to human organisms, as when we attributed Dryads to trees.'⁹ This is precisely the announcement made by Crick. The problem with pushing reductionism to this, its logical terminus, is that it conceptually reduces away the reducers:

While we were reducing the world to almost nothing we deceived ourselves with the fancy that all its lost qualities were being kept safe (if in a somewhat humbled condition) as “things in our own mind”. Apparently we had no mind of the sort required. The Subject is as empty as the Object. Almost nobody has been making linguistic mistakes about almost nothing...¹⁰

Lewis thinks this is a common sort of mistake:

We start with a view which contains a good deal of truth, though in confused or exaggerated form. Objections are then suggested and we withdraw it. But [then] we discover that we have emptied the baby out with the bathwater and that the original view must have contained certain truths for lack of which we are now entangled in absurdities. So here. In emptying out the dryads and the gods (which, admittedly, “would not do” just as they stood) we appear to have thrown out the whole universe, ourselves included.¹¹

As Paul K. Moser and David Yandell warn, naturalists, who begin with an *a priori* commitment to explaining everything in terms of material reality: ‘must attend to the risk of neglecting genuine data and truths resistant to a monistic explanatory scheme. What monism gains by unification of multiplicity in data may be lost by neglect of genuine recalcitrant data. Explanatory unity may be a virtue, but it will be virtuous only if pertinent truths and data are not excluded for the sake of theoretical simplicity.’¹² Reductionism is a bad habit because the legitimate search for the simplest unifying explanation is pursued with such dogmatic commitment that the demand for explanatory simplicity outweighs the primary requirement that *explanations must be adequate to the nature of the data they are meant to explain*. The facts are *reduced* to fit a single, simplistic, inadequate explanation, rather than explanation being expanded or multiplied to fit the facts. When the demand for simplicity outweighs the demand for adequacy, explanation becomes ‘explaining-away’ as data is dismissed as being ‘only apparent’ on the grounds that if it were genuine *it wouldn’t fit the explanation!* Crick’s hypothesis is truly ‘astonishing’, because it really doesn’t seem to fit the data of human nature. But Crick’s naturalistically motivated reductionistic habit naturally takes precedence over the inconvenient data of everyday experience.

The Abolition of Man: Conceptual and Actual

The Abolition of Man opens with Lewis observing how the reductionistic habit naturally treats all talk of values as subjective (dependent upon the subject) rather than objective (independent of the subject). The naturalist’s view of reality has no room for objective values, as Peter Kreeft explains: ‘Modernity, confining itself to the scientific method as the model for knowing reality, deliberately induces in itself what Lewis calls a dog-like state of mind, full of facts and empty of significance.’¹³ Whereas ‘The Empty Universe’ traces the internal logic of reductionism to the *conceptual* abolition of man (pointing out a *philosophical* problem with reductionism, a problem elaborated upon by Lewis elsewhere as his anti-naturalism ‘argument from reason’¹⁴), *The Abolition of Man* traces the internal logic of reductionism from the present abolition of objective values to the *actual* abolition of man (pointing out a *practical* problem with reductionism). Kreeft explains the structure of Lewis’ argument:

Part I, “Men without Chests”, points out that our educational systems are already producing... the ‘men without chests’, men without operative organs of apprehending objective values, or natural law, or the *Tao*... After part 2 defines and defends the *Tao*, part 3 widens our focus by asking the question: Into what kind of society is this new education now being inserted? What is the social context of the new moral Subjectivism? The answer is: a society with a new *summum bonum*: applied science... or ‘Man’s conquest of Nature.’ ...The first chapter (‘Men without chests’) is the negative one; the second (‘The Way’) is the positive one, and the third (‘The Abolition of Man’) is the prophetic one. The first is the present, the second is the past, and the third is the future, if we keep sliding down the slippery slope.¹⁵

Men Without Chests

In ‘Men without chests’ (which Charles Colson calls his favourite essay of all time¹⁶) Lewis relates how an English textbook he calls *The Green Book*, and whose authors he names ‘Gaius’ and ‘Titus’, discusses a story about the poet Coleridge and a waterfall. Two tourists were present besides Coleridge, one called the waterfall ‘sublime’, the other said it was ‘pretty’. Coleridge ‘mentally endorsed the first judgement and rejected the second with disgust.’¹⁷ Gaius and Titus comment:

When the man said *This is sublime*, he appeared to be making a remark about the waterfall... Actually... he was not making a remark about the waterfall, but a remark about his own feelings. What he was saying was really *I have feelings associated in my mind with the word “Sublime”*, or shortly, *I have sublime feelings*.¹⁸

This confusion, say Gaius and Titus, is common: ‘We appear to be saying something very important about something: and actually we are only saying something about our own feelings.’¹⁹ Hence, Lewis observes, beauty is reduced to nothing but subjective feelings: ‘No schoolboy will be able to resist the suggestion brought to bear upon him by that word *only*.’²⁰

Gaius and Titus have adopted (and propagated under the guise of English education) a reductionistic philosophy of value represented by Scottish Philosopher David Hume, who argued that:

All sentiment is right; because sentiment has a reference to nothing beyond itself, and is always right, whenever a man is conscious of it. But all determinations of the understanding are not right; because they have a reference to something beyond themselves, to wit, a real matter of fact; and are not always conformable to that standard... Beauty is no quality in things themselves: it exists merely in the mind which contemplates them; and each mind perceives a different beauty.²¹

According to Hume: ‘beauty is nothing but a form which produces pleasure.’²² If masochistic acts produce in me a feeling of aesthetic pleasure, then masochism is ‘beautiful’, *for me*. Beauty depends upon *my* pleasure, and is thus relative *to me* as a subject. No aesthetic judgements can be false, because no one can be mistaken about

their own subjective aesthetic reactions: 'Sublimity... does not reside in any of the things of nature, but only in our own mind.'²³ The end result of this ugly view of beauty, as Lewis saw, is that 'the emotion, thus considered by itself, cannot be either in agreement or disagreement with reason... the world of facts, without one trace of value, and the world of feelings, without one trace of truth or falsehood, justice or injustice, confront each other, and no rapprochement is possible.'²⁴

The particular example of values reduction highlighted by Lewis concerns aesthetic value, but the same points apply to moral value. In each case, what the reductionistic habit of naturalism rejects is belief in that Natural Law which the Chinese called the *Tao* (the Way): 'the doctrine of objective value, the belief that certain attitudes are really true, and others really false, to the kind of thing the universe is and the kind of things we are.'²⁵

The Way

The theory of value adopted by Hume, Gaius and Titus looks very much like putting the cart before the horse. After all, aesthetic value, like moral value, is *experienced* as a reality beyond ourselves that impinges upon us. Which should we trust, our experience of beauty, or the subjective theory of beauty? We can't do both: 'when we call a sunset beautiful,' admits Anthony O'Hear, 'we unreflectively take ourselves to be speaking of the sunset and its properties. We do not, as Hume [and his followers] maintain, take ourselves to be speaking about nothing in the object, or to be merely gilding and staining it with projected sentiment...'²⁶ As Lewis' contemporary, C.E.M. Joad wrote: 'Beauty belongs, *prima facie*, to things. It is not emotions which are beautiful but that which arouses them.'²⁷ This objective view of beauty represents the common sense presumption of human tradition, as Philosopher E.R. Emmet (himself a subjectivist) admitted:

There is not much doubt that the view [of beauty] that has been most strongly held by philosophers in the past, from Plato onwards, has been the objective one – that is that beauty in a sense is something that is there, that whether an object is beautiful or not is a matter of fact and not a matter of opinion or taste, and that value judgements about beauty are true or false...²⁸

Lewis begins his counterattack on the subjectivism adopted and propagated by Gaius and Titus by pointing out that: 'the man who says *This is sublime* cannot mean *I have sublime feelings*... The feelings which make a man call an object sublime are not sublime feelings, but feelings of veneration.'²⁹ The correct 'translation' of the tourist's assertion, if a translation must take place, would be 'I have humble feelings.'³⁰ Otherwise we would end up translating assertions such as 'You are contemptible', as 'I have contemptible feelings', which is ludicrous. The subjectivist confuses their pleasurable experience of beauty with the beauty that they experience as pleasurable. While the pleasurable *experience* of beauty is obviously 'in the eye (or ear) of the beholder' it hardly follows that the beauty thus experienced is similarly subjective. As Douglas Groothuis says, 'Beauty is not *only* in the eye of the beholder.'³¹

If a 'humble' feeling of 'veneration' prompts Coleridge's agreement that the waterfall is sublime, we may ask *whether that feeling was an appropriate response to its object*. In other words, aesthetic delight may be appropriate or inappropriate

relative *not to the person doing the appreciating, but to the nature of the object being appreciated*. Lewis explained:

Until quite modern times all... men believed the universe to be such that certain emotional reactions on our part could be congruous or incongruous to it - believed, in fact, that objects did not merely receive, but could merit, our approval or disapproval... The reason why Coleridge agreed with the tourist who called the cataract sublime and disagreed with the one who called it pretty was of course that he believed inanimate nature to be such that certain responses could be more 'just' or 'appropriate' to it than others... the man who called the cataract sublime was not intending simply to describe his own emotions about it: he was also claiming that the object was one which merited those emotions.³²

Lewis draws upon Augustine's definition of virtue as *ordo amoris*, appropriate love: 'the ordinate condition of the affections in which every object is accorded that kind and degree of love which is appropriate to it.'³³ Hence: 'because our approvals and disapprovals are thus recognitions of objective value or responses to an objective order, therefore emotional states can be in harmony with reason... or out of harmony with reason...'³⁴ As G.E. Moore argued: 'the beautiful should be *defined* as that of which the admiring contemplation is good in itself... the question whether it is truly beautiful or not, depends upon the *objective* question whether the whole in question is or is not truly good.'³⁵ Alvin Plantinga explains: 'To grasp the beauty of a Mozart D Minor piano concerto is to grasp something that is objectively there; *it is to appreciate what is objectively worthy of appreciation*.'³⁶ Or as Lewis wrote: 'To say that the cataract is sublime means saying that our emotion of humility is appropriate or ordinate to the reality, and thus to speak of something else besides the emotion...'³⁷

Since ancient times, it has been recognized that aesthetics and ethics go hand in hand because goodness is a beautiful thing and beauty is a good thing. Therefore, if moral values are objective, it would be reasonable to think that aesthetic values are likewise objective. As Anthony O'Hear argues: 'so central a feature of human life as aesthetic appreciation could not be locally insulated from standards with wider application.'³⁸ J.L. Mackie made it clear that his rejection of objective values included not only moral goodness, but 'non-moral values, notably aesthetic ones, beauty and various kinds of aesthetic merit',³⁹ because 'clearly much the same considerations apply to aesthetic and to moral values, and there would be at least some initial implausibility in a view that gave the one a different status from the other.'⁴⁰ Hence we can argue for the objectivity of beauty by analogy with the objectivity of morality.

The commander of the Belsen concentration camp, observing the Holocaust, may have found himself aesthetically pleased by what he perceived - somewhat, we may suppose, after the manner of a pyromaniac. However, most people would agree that the Holocaust was not a beautiful event, because (to put it mildly) it was not a good thing. Indeed, most people would agree that helpless and innocent victims being systematically slaughtered must be an ugly affair, because it is an evil affair.

Just as Hitler may reasonably be supposed to have approved of the Holocaust as a good thing, while yet leaving us with the intuition that the Holocaust was a bad thing, so the fact that someone finds something 'pleasing when perceived' leaves us with the intuition that this fact alone cannot settle the matter of whether the thing in question really is beautiful or not. The concept of aesthetic value is inextricably linked to the concept of moral value, and the objectivity of the one guarantees the objectivity

of the other. To return to the Belsen commander's supposed approval of the Holocaust, I suggest that, whether moral or aesthetic, his approval says little about the truth of his assertion that the Holocaust is good or beautiful. While aesthetic utterances certainly have a subjective aspect, assertions of the type 'That waterfall is sublime' or 'This Holocaust is beautiful' are matters of objective truth or falsehood (the first assertion was probably true, while the second is certainly false). This seems to me to be the most natural analysis of such utterances, an analysis I do not believe we should reduce or attempt to 'explain away'. One can see that explaining away the ugliness of the Holocaust by reducing it to nothing but a subjective feeling of revulsion in certain minds would stultify the attempt to rationally condemn any human act of any nature whatsoever. The practical consequences that would follow from adopting such a Humean subjectivism could be quite as momentous as the moral consequences.

How, it is asked, can beauty be an objective quality when people obviously disagree about what is and is not beautiful? This objection to the objectivity of aesthetic value parallels the common objection advanced against objective moral values, that such values must be subjective because different people hold different moral beliefs. However, the moral objectivist may accept that different people and cultures have different moral *beliefs*, without needing to capitulate over the existence of objective moral *values*. If the objection from differing opinions can be met with regards to moral value, then parallel responses will prevail in the case of aesthetic value. Lewis noted: 'some people say the idea of a Law of Nature or decent behaviour known to all men is unsound, because different civilizations and different ages have had quite different moralities. But this is not true... if anyone will take the trouble to compare the moral teaching of, say, the ancient Egyptians, Babylonians, Hindus, Chinese, Greeks and Romans., what will really strike him will be how very like that are to each other and to our own.'⁴¹ Some people may simply be wrong about what the standard of morality actually is 'just as you find a few people who are colour-blind or have no ear for a tune'⁴²; the fact that not everyone agrees about what is right and wrong does not prove that there is no ultimate standard. Besides, we are not here concerned with the recognition of particular ethical rules, but with the general and objective distinction between right and wrong.

Indeed, that people disagree about ethics indicates, not that moral values are subjective, but that they are objective. People disagree about matters of objective truth, such as whether moral values are objective or not. When it comes to subjective truths, people don't disagree. Unless you had reason to think I was teasing or lying, you would not disagree with my claim to prefer *Pepsi* to *Coca Cola*. I subjectively prefer *Pepsi Cola* to *Coca Cola*. My claim is not the *Pepsi Cola* is objectively better than *Coca Cola*, but simply that I, subjectively, prefer it. It would be very odd to disagree we me about this claim! The fact that people disagree somewhat about moral values is therefore actually evidence that moral values are objective. To the parallel argument advanced against the objectivity of beauty we can make parallel responses: Differing subjective opinions about aesthetic matters does not prove that aesthetic assertions have no objective content. No one disagrees with the assertion that rainbows are beautiful, and says instead that they are ugly! In other words, aesthetic disagreement is not all that widespread or divergent. Moreover, disagreement about aesthetics indicates not subjectivity, but objectivity.

What Lies Behind Beauty

If people are created in the image of God, then they have an intrinsic beauty that grounds the moral requirement that people be appreciated as ends in themselves rather than used merely as means to an end. Take away the artist, and there is no such thing as art. Take away the creator, and there is no reason to treat people as creations. Just as you can't have art without an artist, so you can't have goodness without Goodness Himself, or beauty without Beauty Himself.

The link between objective beauty and divinity is the same as the link proposed by C.S. Lewis' moral argument between objective goodness and divinity: namely, that without divinity - which necessarily exemplifies total objective goodness (and hence total objective beauty, because goodness is beautiful) - there would be no objective goodness. Likewise, without objective goodness, there would be no objective beauty, because nothing can be objectively beautiful that it is not objectively good to appreciate. If no such Being of absolute beauty exists, then the ideal of beauty by which we judge a waterfall to be beautiful cannot transcend our finite consciousness, and our judgements of beauty must therefore be relative and subjective. As Kreeft observes: 'God is objective spirit, and when "God is dead", the objective world is reduced to matter and the spiritual world is reduced to subjectivity...'⁴³ If a rainbow is objectively beautiful, then 'somewhere over the rainbow' there must exist a being of absolute and unsurpassable beauty.

Our judgments about beauty must be measured against some objective standard of Beauty which the human mind apprehends and employs. This standard of beauty cannot depend upon any individual finite mental state, or collection thereof, or else it would of necessity be a subjective standard. Objective aesthetic judgments cannot depend upon a subjective aesthetic standard. Therefore, there must exist an objective standard of beauty that is independent of finite minds. However, an aesthetic standard is not the sort of thing that could possibly exist in the contingent and changing physical world. Therefore, the standard of beauty must exist neither in finite minds, nor in the physical world, but in an infinite Mind who perfectly embodies beauty.

The Abolition of Man

In the third chapter of *The Abolition of Man*, Lewis gives a dystopian analysis of the consequences of conceiving values subjectively. Lewis' observes that what we call man's power is in fact power possessed by some men (in the generic sense) by which they may or may not allow others to profit. Hence, each new power won by man is also a power over man. Now, the ultimate stage in man's conquest of nature, and so of men's power over mankind, will come when man has obtained the power to control himself, by means of genetic and psychological manipulation. Imagine what would happen if this power were used.

Lewis points out that in the older system of education the kind of man that teachers wanted to produce, and their motives for wanting to produce him, were both prescribed by an objective moral standard which transcended pupil and teacher alike. Lewis predicts that this will change if man comes to believe that values are merely natural phenomena. Judgements of value could be produced in the pupil as part of the state's educational conditioning programme. Hence, the moral law will be the product, not the motive, of education. The teachers, or conditioners, will choose what

moral law they will to produce in the human race. They will be the motivators of humanity; but how will they be motivated themselves?

For a time, perhaps, by survivals, within their own minds, of the old [moral law]. Thus at first they may look upon themselves as servants and guardians of humanity and conceive that they have a 'duty' to do 'good'. But it is only by confusion that they can remain in this state. They recognise the concept of duty as the result of certain processes which they can now control... One of the things they now have to decide is whether they will, or will not, so condition the rest of us that we can go on having the old idea of duty and the old reaction to it. How can duty help them to decide that? Duty itself is up for trial: it cannot also be the judge. And 'good' fares no better. They know quite well how to produce a dozen different conceptions of good in us. The question is which, if any, they should produce... that is the [moral law] which they may decide to impose in us, but which cannot be valid for them. If they accept it, then they are no longer the makers of conscience but still its subjects.

It is not that the teachers are bad men, says Lewis:

Stepping outside the [moral law], they have stepped into the void. Nor are their subjects necessarily unhappy men. They are not men at all: they are artefacts. Man's final conquest has proved to be the abolition of Man... Yet the conditioners will act ... All motives that claim any validity other than that of their felt emotional weight at a given moment have failed them ... but what never claimed objectivity cannot be destroyed by subjectivism ... the Conditioners, therefore, must come to be motivated simply by their own pleasures [or fears] ... those who stand outside all judgements of value cannot have any ground for preferring one of their impulses to another except the emotional strength of that impulse.

Therefore, at the moment of man's conquest of nature, we may find the human race in general subjected to some individuals, and those individuals subjected 'to that in themselves which is purely "natural"—to their irrational impulses'. Nature rules the conditioners, and through them, humanity:

Man's conquest of Nature turns out, in the moment of its consummation, to be Nature's conquest of Man... Either we are... obliged for ever to obey the absolute value... or else we are mere nature to be kneaded and cut into new shapes for the pleasures of masters who must, by hypothesis, have no motive but their own 'natural' impulses. Only the [objective Moral Law] provides a common human law of action which can over-arch rulers and ruled alike. A dogmatic belief in objective values is necessary to the very idea of a rule which is not tyranny or an obedience which is not slavery.

Lewis does not highlight the link between objective value and the necessity of God's existence in *The Abolition of Man*, and in a sense his argument does not directly require this link to be made. It is enough for him to argue that the reduction of objective values to subjective feelings leads, via scientific knowledge applied without the governance of objective moral principles, to the practical (as well as conceptual) reduction of the reducers. However, Lewis' argument becomes stronger when the link

between value and deity (which Lewis makes elsewhere) is made explicit, because it allows us to draw not only upon the existence of ‘the *Tao*’, but upon the intentions of the personal creator who embodies, obligates and commands ‘the *Tao*’ and who made humanity in His image as an artist makes a work of art. No doubt Lewis began *The Abolition of Man* with a discussion of beauty because beauty was the subject of the reductionistic habit exhibited in a book ostensibly intended to teach English rather than axiology (the theory of value). However, the analogy between an artist and their art and God and creation allows us to gain a clearer purchase on what is wrong with ‘playing God’ in the way Lewis foresaw. Today, we are that much closer to the catastrophe Lewis predicted. In reviewing the contemporary debate about eugenics, we need to bear in mind the principles Lewis defended – the shortcomings and dangers of reductionism, the objectivity of value, and the link between value and God - more than ever.

Taking Stock of *The Abolition of Man*

G.K. Chesterton, a formative influence upon Lewis, observed that:

when once one begins to think of man as a shifting and alterable thing, it is always easy for the strong and crafty to twist him into new shapes for all kinds of unnatural purposes... It is a very well-grounded guess that whatever is done swiftly and systematically will mostly be done by a successful class and almost solely in their interests. It has therefore a vision of inhuman hybrids and half-human experiments much in the style of Mr. Wells’s ‘Island of Dr. Moreau.’ ... Whatever wild image one employs it cannot keep pace with the panic of the human fancy, when once it supposes that the fixed type called man could be changed... That is the nightmare with which the mere notion of adaption threatens us. This is the nightmare that is not so very far from the reality. It will be said that not the wildest evolutionist really asks that we should become in any way unhuman... but this is exactly what not merely the wildest evolutionists urge, but some of the tamest evolutionists...⁴⁴

Gregory Stock is a tame evolutionist.⁴⁵ His book, *Redesigning Humans – choosing our children’s genes*, is a significant contribution to the contemporary bioethical debate that advocates ‘choosing our children’s genes’ in order to design future generations. Stock argues that this practice is inevitable and that we should embrace it with optimism, and quotes a ‘letter to Mother Nature’ from *The Extropians*:

truly we are grateful for what you have made us. No doubt you did the best you could. However, with all due respect, we must say that you have in many ways done a poor job with the human constitution... We have decided it is time to amend the human constitution... Over the coming decades we will pursue a series of changes to our own constitution... We will no longer tolerate the tyranny of aging and death... We will expand our perceptual range... improve our neural organization and capacity... reshape our motivational patterns and emotional responses... take charge over our genetic programming and achieve mastery over our biological and neurological processes.⁴⁶

My reaction to *The Extropians* is that they sound uncomfortably like the N.I.C.E of C.S. Lewis’ *That Hideous Strength*, a novel that powerfully dramatised the ideas of

The Abolition of Man.⁴⁷ When they talk about reshaping human ‘motivational patterns and emotional responses’ their language includes what is left of the concept of morality once reductionism has taken its cut. Stock’s reaction to *The Extropians* is to write that: ‘This image of the human journey towards a superior “posthuman” may be difficult for many to take seriously, but the determination to use whatever new technologies emerge from today’s explorations of human biology aligns well with prevailing attitudes.’⁴⁸ But then, with Lewis, mightn’t we ‘take a low view of “climates of opinion”’?⁴⁹

Opposing Stock and *The Extropians* is Francis Fukuyama, another tame evolutionist, with his book from the same publisher: *Our Posthuman Future – Consequences of the Biotechnology Revolution*.⁵⁰ Fukuyama argues that human genetic engineering is not inevitable, and that we should take steps to prevent ‘what... C.S. Lewis called the “abolition of man”’.⁵¹

The debate between Stock and Fukuyama can be analysed in terms of three theses they variously affirm and deny, and one important assumption they share. Stock’s first thesis, shared by Fukuyama, is that our ‘genes matter and are responsible for important aspects of who we are’⁵², and that we can now choose who, and ultimately what future humans will be by choosing their genes. Our authors are right to claim that genetically engineered humans are a possibility. There are question marks over how far such change can go, and how far it has to go before the end product is ‘post-human’, as Stock envisages and Fukuyama fears. For the sake of argument, I will grant Stock and Fukuyama their shared first thesis, and concentrate on their points of disagreement. Stock’s second thesis, opposed by Fukuyama, is that the widespread use of this ability to choose our children’s genes is inevitable. Stock’s third thesis, also opposed by Fukuyama, is that this inevitable step should be embraced with optimism. Stock and Fukuyama’s important shared assumption is that human nature is not created by God in the image of God, but by ‘the blind watchmaker’ of nature in the image of nothing and no-one at all. Fukuyama (whose father was a Congregationalist minister) appears to be an agnostic, while Stock is an atheist. Nevertheless, in practice both authors share a lack of belief in God and argue within the constraints of the naturalistic worldview. As we will see, this shared negative assumption renders the arguments of both Stock and Fukuyama self-contradictory.

Stock takes the atheistic assumption to its logical consequence, and denies that human nature as in any way ‘sacred’, or that ‘playing God’ with human nature is a problem. As atheist James Watson says: ‘We are the products of evolution, not of some grand design which says this is what we are and that’s it... People say we are playing God. My answer is: ‘If we don’t play God, who will?’’⁵³ Fukuyama, on the other hand, thinks that choosing our children’s genes is a bad thing because it means the possible eradication of human nature, and he sees having a human nature as the sole grounds for common human rights (but then, why should ‘post-humans’ have *human* rights?). Although Fukuyama recognizes that objecting to genetic engineering on the grounds that human nature is created in the image of God is a coherent argument, like Stock, he views this as a false hypothesis. Unlike Stock, Fukuyama thinks one can do without God in making a sound objection to choosing our children’s genes. They are both wrong.

Is Eugenics Inevitable?

Stock argues that the development of genetic knowledge and technology that will permit 'conscious human evolution' is inevitable: 'once a relatively inexpensive technology becomes feasible in thousands of laboratories around the world and a sizeable fraction of the population sees it as beneficial, it *will* be used.'⁵⁴ Stock argues that the technology that will make choosing our children's genes possible will arrive whether or not it is pursued for its own sake: 'The fundamental discoveries that spawn the coming capabilities will flow from research deeply embedded in the mainstream, research that is highly beneficial, enjoys widespread support, and certainly is not directed toward a goal like germline engineering.'⁵⁵ This is the pessimistic portion of Stock's thesis, a pessimism opposed by Fukuyama:

pessimism about the inevitability of technological advance is wrong, and it could become a self-fulfilling prophecy if believed by too many people... We do not have to accept any of these future worlds under a false banner of ... unlimited reproductive rights or of unfettered scientific inquiry. We do not have to regard ourselves as slaves to inevitable technological progress... freedom means the freedom of political communities to protect the values they hold most dear, and it is that freedom that we need to exercise with regard to the biotechnology revolution.⁵⁶

Lewis would agree that humans don't have to go where they don't want to go, whether the destination is spiritual or technological. Fukuyama is merely advocating that we stop the clock to prevent a potential tide of genetic engineering, whereas Lewis believed that it was possible, and sometimes necessary, to turn the clock *back*: 'Would you think I was joking if I said that you can put a clock back, and that if the clock is wrong it is often a very sensible thing to do? ...If you are on the wrong road, progress means doing an about-urn and walking back to the right road...'⁵⁷ If we disagree with Stock's avocation of eugenics, we should join with Fukuyama in calling for the regulation of biotechnology to outlaw germline engineering. However, imposing legal restraints is no substitute for winning the battle of ideas so that people don't want to do the thing you want to outlaw.

Should we Embrace Eugenics?

Stock takes his pessimism with regards to regulation to justify the claim that we should embrace germline engineering within 'a free-market environment with real individual choice, modest oversight, and robust mechanisms to learn quickly from mistakes'.⁵⁸ This is the optimistic portion of Stock's thesis: 'At the heart of the coming possibilities of human enhancement' says Stock, 'lies the fundamental question of whether we are willing to trust in the future',⁵⁹ whatever that means. Stock seems to embody the attitude summed up by Chesterton as: 'Yesterday, I know I was a human fool, but to-morrow I can easily be the Superman.'⁶⁰ Because of his optimism, Stock is willing to embrace genetic engineering despite his belief that: 'We cannot know where self-directed evolution will take us, nor hope to control the process for very long.'⁶¹ Stock here displays the optimistic faith in human nature typical of secular humanism: 'Those who are happy to let [genetic engineering] lead us where it may are trusting that our children, our children's children and the many to be born after them will have the wisdom and clarity not to use this powerful

knowledge in destructive ways.’⁶² As Lewis’ *Screwtape* says, scientific humanism fixes men’s affections on the Future and therefore is to be encouraged.⁶³

Fukuyama’s doesn’t share Stock’s faith in the future, arguing that the distopian nature of the society depicted by Huxley’s *Brave New World* lies in the fact that ‘the people in *Brave New World* may be healthy and happy, but they have ceased to be *human beings*.’⁶⁴ Hence, while Stock has faith in the post-human future, Fukuyama fears for the future lest it herald just such an ‘abolition of man’. However, Fukuyama asks:

What is so important about being a human being in the traditional way. . ? After all, what the human race is today is the product of an [unintended] evolutionary process that has been going on for millions of years... There are no fixed human characteristics, except for a general capability to choose what we want to be, to modify ourselves in accordance with our desires. So who is to tell us that being human and having dignity means sticking with a set of emotional responses that are the accidental byproduct of our evolutionary history? There is... no such thing as human nature or a ‘normal’ human being, and even if there were, why should that be a guide for what is right and just?... Instead of taking these characteristics and saying that they are the basis for ‘human dignity,’ why don’t we simply accept our destiny as creatures who modify themselves?⁶⁵

Fukuyama proceeds to take up arms against this suggestion; but he is fighting an atheistic argument that cannot be vanquished on its home turf.

If an artist creates a work of art, it is their intentions that rightfully prescribe the nature of their creation is and how it should be treated. One might prefer the artist to have used a different pallet, but you shouldn’t touch-up the *Mona Lisa* in this season’s colours. Works of art are what they are and should be received and appreciated as such. C.S. Lewis explained this when he wrote that: ‘art can be either “received” or “used.” When we “receive” it we exert our senses and imagination and various other powers according to a pattern invented by the artist. When we “use” it we treat it as assistance for our own activities.’⁶⁶ Works of art can be *preserved*, they can be *restored*, but they shouldn’t be *changed* (at least, not if to do so means replacing the original work). Most especially, the work of art should not reject the artist’s intentions for itself! As Lewis said of man’s relationship to God: ‘He is the Painter; we are only the picture.’⁶⁷ If humans are the artistic creation of a Great Artist, then it is *he* who is to ‘tell us that being human and having dignity means sticking with a set of emotional reponses that are the [nonaccidental] product of [whatever methods he used to bring about our existence].’⁶⁸ If there is a God, then there *is* such a thing as a properly functioning human nature,⁶⁹ a nature that can act as a guide for what is the right and just way to treat a human being.

Fukuyama devotes a great deal of effort to countering the claim that there is no such thing as a human nature, but even if he wins that battle, he fails to make the case that we should take that nature as ‘a guide for what is right and just’ because ‘having dignity means sticking with a set of emotional responses that are the accidental byproduct of our evolutionary history’. As Geoff Mulgan writes in his review of Fukuyama’s thesis: ‘The ability to speak, the tendency to bring children up in families, and even belief in God, may all be typical of the human species and not explicable solely in cultural terms, but that does not make them in any strong sense

constitutive of human nature. Nor is it clear why we should want to preserve all of these behaviours.⁷⁰

Stock's quasi-spiritual rhetoric (which puts me in mind of a certain biblical incident involving the fruit of the knowledge of good and evil) calls for a stronger response than can be made without invoking God: 'To turn away from germline selection and modification... would be to deny our essential nature and perhaps our destiny. Ultimately, such a retreat might deaden the human spirit of exploration, taming and diminishing us.'⁷¹ According to Stock:

we are likely to find that being human has little to do with the particular physical and mental characteristics we now use to define ourselves... As we move into the centuries ahead, our strongest bond with one another may be that we share a common biological origin and are part of a common process of self-directed emergence into an unknowable future.⁷²

Fukuyama's objection to choosing our children's genes is precisely that it means the possible eradication of human nature that Lewis foresaw and Stock embraces: 'the most significant threat posed by contemporary biotechnology is the possibility that it will alter human nature and thereby move us into a 'posthuman' stage of history.'⁷³ Stock and Fukuyama simply take different moral views on the possibility of 'the abolition of man', moral views that are inadequately grounded in both cases.

Fukuyama argues that there is an essential human nature (something that Stock seems to accept, if only in a truncated sense) which grounds the appropriateness of 'human rights', and urges that human nature *therefore* ought not to be meddled with (readers should ponder what missing premise Fukuyama requires to make a valid syllogism here):

human nature exists, is a meaningful concept, and has provided a stable continuity to our experience as a species. It is, conjointly with religion, what defines our most basic values. Human nature shapes and constrains the possible kinds of political regimes, so a technology powerful enough to reshape what we are will have possibly malign consequences for liberal democracy and the nature of politics itself.⁷⁴

Fukuyama argues that the demand for equality implies: 'that when we strip all of a person's contingent and accidental characteristics away, there remains some essential human quality underneath that is worthy of a certain minimal level of respect – call it Factor X.'⁷⁵ So what is Factor X?

For Christians, the answer is fairly easy... Man is created in God's image, and therefore shares in some of God's sanctity, which entitles human beings to a higher level of respect than the rest of natural creation. In the words of Pope John Paul II... "It is by virtue of his spiritual soul that the whole person possesses such dignity even in his body".⁷⁶

But Fukuyama doesn't want to take the obvious path. For him, Factor X: 'cannot be reduced to the possession of moral choice, or reason, or language, or sociability, or sentience, or emotions, or consciousness, or any other quality that has been put forward as a ground for human dignity. It is all of these qualities coming together in a human whole...'⁷⁷ Hence, 'human nature is the sum of the behaviour and

characteristics that are typical of the human species, arising from genetic rather than environmental factors [where] typicality is a statistical artefact [that] refers to something close to the median of a distribution of behaviour or characteristics.⁷⁸ This account of 'Factor X' as a holistic conglomerate of properties is nowhere near robust enough to do the ethical work Fukuyama requires of it. As Fukuyama admits: 'the big ethical controversies raised by biotechnology will not be threats to the dignity of normal adult human beings, but rather to those who possess something less than the full complement of capabilities that we have defined as characterizing human specificity. The largest group of beings in this category are the unborn...'⁷⁹ *In which case, what is the supposed problem with genetically engineering the unborn?* Fukuyama notes that this question: 'has already come up with regard to stem cell research and cloning', which 'requires the deliberate destruction of embryo's, while so-called therapeutic cloning requires not just their destruction but their deliberate creation for research purposes prior to destruction. (As bioethicist Leon Kass notes, therapeutic cloning is not therapeutic for the embryo.)'⁸⁰ Fukuyama's response to this problem? 'I do not want to rehearse the whole history of the abortion debate and the hotly contested question of when life begins. I personally do not begin with religious convictions on this issue and admit to considerable confusion in trying to think through its rights and wrongs.'⁸¹ Unfortunately for Fukuyama, this is a confusion that seeps into the heart of his anti-germline-engineering argument and stops it dead in its tracks. What Fukuyama needs is a dualistic anthropology wherein: 'The functions characteristic of a person are grounded in the essence of the person, not the other way around...'⁸² As Moreland and Rae complain: 'Advocates of a functional view of a human person have the metaphysical cart before the horse in placing the priority on function in assigning personhood.'⁸³

Then again, so what if human nature 'exists', 'is a meaningful concept', 'has provided a stable continuity to our experience as a species', helps define 'our most basic values' or 'shapes and constrains the possible kinds of political regimes', if none of this is an objectively good state of affairs that we morally ought not to abolish? While the existence of an essential common human nature may be a *necessary* condition of there being *human* rights, one can question whether this is a *sufficient* condition of human *rights*. Fukuyama's argument only covers half the waterfront (and that, inadequately). What becomes of his argument against genetic engineering if he wants to preserve a robust moral *ought* while rejecting the 'religion' he mentions (and he primarily means Christianity) as at least partially constitutive of the value defining process? Doesn't it collapse into self-contradiction? What sense does it make to ground equal human rights in an essential human nature if one can only value essential human nature *because it grounds equal human rights*? Isn't there a vacuous moral circle here?

Fukuyama attempts to defend his objection against the rebuttal that it commits what philosophers call 'the naturalistic fallacy', the fallacy of deriving a moral ought from an amoral is. His crucial counter example to the naturalistic fallacy, his suggestion for how to get to a moral ought from an amoral is, is drawn from Alisdair MacIntyre: 'If I stick a knife in Smith, they will send me to jail; but I do not want to go to jail; so I ought not (had better not) stick a knife in him.'⁸⁴ However, the 'ought' in MacIntyre's syllogism is quite obviously not a moral *ought*, but a purely pragmatic 'ought' (a 'had better not', as MacIntyre himself says) derived from a self-interested and emotive premise. Fukuyama's meta-ethical theory is a mixture of pragmatism and emotivism:

the process of value derivation is not fundamentally a rational one, because its sources are the 'is' of the emotions... Virtually every pre-kantian philosopher has an implicit or explicit theory of human nature that set certain wants, needs, emotions, and feelings above others as more fundamental to our humanness. I may want my two week vacation, but your desire to escape slavery is based on a more universal and more deeply felt longing for freedom, and it therefore trumps my want...⁸⁵

Thus Fukuyama engages in the habit of reductionism. The strange thing about Fukuyama's discussion of ethics is that it consistently avoids mentioning the concept of goodness, while all the time goodness is implicitly assumed to attach to such concepts as the 'satisfaction' of 'fundamental', 'more universal', or 'more deeply felt' needs and wants, and to 'values' that are pragmatically useful because they serve the 'important' purpose of making 'collective action' possible. Of course, it would be hard to suggest that collective action and the satisfaction of fundamental human needs were *not* good things; but Fukuyama is asking us to agree with him that these *things* can *define and ground what goodness is*. This amounts to the adoption of a subjective meta-ethic that illegitimately derives a moral *ought* from an amoral *is*. As Lewis pointed out, such subjective moral values cannot act as norms of action for those who have to choose what humans will henceforth desire. Moreover, as Lewis argued in *Mere Christianity*, one can only account for the existence of an objective moral law by recognizing the existence of an objective moral lawgiver. Hence Fukuyama's non-theistic worldview pulls the rug from underneath his objection to genetic engineering.

We need to be able to say that humans have equal dignity and worth because there is an essential human nature *that is an objectively good thing which ought not to be abolished*. Given that the moral argument for God is a sound piece of reasoning, this is just what we cannot say if we reject God.⁸⁶ As Stock asks: 'where does this 'right' [to an unaltered genetic constitution] come from? The assertion is spiritual, and virtually identical to the declaration that we should not play God. One cannot rebut this as a religious belief, but it is unconvincing in secular garb.'⁸⁷

Stock considers the objection to gene-line manipulation, 'that we should not play God'⁸⁸, noting that 'The special significance of humanity seemed clear to Western thinkers in the Middle Ages; Earth was at the centre of the universe [a position the ancients actually took to indicate it's lowliness], and we were fashioned in God's image'⁸⁹, but he inaccurately argues that 'The Copernican revolution shattered that notion, wrenching humanity from its exalted station and leaving it stranded on a peripheral planet circling one of many stars.'⁹⁰ and adds: 'The Darwinian revolution finished the job, leaving us fashioned not by divine consciousness but by random natural forces.'⁹¹ This is nothing but the poorest sort of 'shallow scientific triumphalism'.⁹² The importance of a thing has nothing to do with its spatial position, and scientific descriptions of the universe are in principle incapable of ruling out the notions of intention and purpose.

Fukuyama's discussion of religious objections to genetic engineering is more sympathetic than Stock's. He makes it crystal clear that there is a distinction between evolution as a scientific theory and Darwinism as atheistic philosophy: 'Since Darwinism maintains that there is no cosmic teleology guiding the process of evolution, what seems to be the essence of a species is just an accidental byproduct of a random evolutionary process.'⁹³ It is, of course, impossible to know that humans are nothing but (note the implied reductionism) 'an *accidental* byproduct of a *random* evolutionary process' unless one knows that 'there is no cosmic teleology guiding the

process of evolution'; and one cannot possibly know *that* unless one knows that God does not exist. Therefore, one cannot disprove God's existence by positing evolution. Such an argument begs the question.

Fukuyama recognizes that objecting to genetic engineering on the grounds that human nature is created in the image of God is a coherent argument:

Christian tradition maintains that man is created in God's image, which is the source of human dignity. To use biotechnology to engage in what... C.S. Lewis called the 'abolition of man' is thus a violation of God's will... Religion provides the clearest grounds for objecting to the genetic engineering of human beings... man is created in God's image. For Christians in particular, this has important implications for human dignity. There is a sharp distinction between human and nonhuman creation...⁹⁴

Fukuyama assumes he must do without this hypothesis: 'While religion provides the most clear-cut grounds for opposing certain types of biotechnology, religious arguments will not be persuasive to many who do not accept religion's starting premises.'⁹⁵ This assumption leads to the collapse of his case against Stock.

There is a second self-contradiction within Fukuyama's argument, for while he calls upon his readers to exercise their freedom to stem the tide of genetic engineering, he ultimately fails to escape from the dilemma that a naturalistic worldview leaves no room for free will. As Lewis explained: 'no thoroughgoing Naturalist believes in free will: for free will would mean that human beings have the power of independent action, the power of doing something more or other than what is involved by the total series of events. And any such separate power of originating events is what the Naturalist denies.'⁹⁶ Fukuyama acknowledges: 'It would be very difficult for any believer in a materialistic account of the universe... to accept the Kantian account of human dignity [an account based on the hypothesis of free will]. The reason is that it forces them to accept a form of dualism – that there is a realm of human freedom parallel to the realm of nature that is not determined by the latter.'⁹⁷ He notes how the Pope has said that: 'theories of evolution which, in accordance with the philosophies inspiring them, consider the mind as emerging from the forces of living nature, or as a mere epiphenomenon of this matter, are incompatible with the truth about man.'⁹⁸ Although he admits that 'the pope has pointed to a real weakness in the current state of evolutionary theory, which scientists would do well to ponder'⁹⁹, Fukuyama fails to embrace dualism, accepting instead the theory that mind, while ultimately 'mysterious'¹⁰⁰, emerges from the forces of nature. However:

What this whole is and how it came to be remain, in Searle's word, 'mysterious'... It is common now for many AI researchers to say that consciousness is an 'emergent property' of a certain kind of complex computer. But this is no more than an unproven hypothesis based on analogy with other complex systems. No one has ever seen consciousness emerge under experimental conditions, or even posited a theory as to how this might come about.¹⁰¹

Fukuyama resorts to what Polkinghorne calls 'promissory naturalism':

The fact of the matter is that we are nowhere close to a break through; consciousness remains as stubbornly mysterious as it ever was... Subjective

mental states... appear to be of a very different, nonmaterial order from other phenomena. The fear of dualism – that is, the doctrine that there are two essential types of being, material and mental – is so strong among researchers in this field that it has led them to palpably ridiculous conclusions... This is not to say that the demystification by science will never happen. Searle himself believes that consciousness is a biological property of the brain much like the firing of neurons or the production of neurotransmitters and that biology will someday be able to explain how organic tissue can produce it. He argues that our present problems in understanding consciousness do not require us to adopt a dualistic ontology or abandon the scientific [read: ‘naturalistic’] framework of material causation.¹⁰²

When the ‘framework of material causation’ is elevated from its status as an initial parsimonious prejudice in favour of material explanations to an absolute metaphysical principle that outlaws non-material explanations, even if they are the best explanation of the data, one has embraced the bad habit of reductionism and moved from science to scientism.

For all his studied agnosticism, Fukuyama manages to shoot himself in the foot when he writes that ‘the behaviour of complex wholes... may be extremely sensitive to small differences in starting conditions and thus may appear chaotic *even when their behaviour is completely deterministic*.’¹⁰³ Fukuyama never provides an argument for thinking that human consciousness is not ‘completely deterministic’. I seriously doubt he can do so unless he embraces some form of dualism (and its attendant theistic implications), as Lewis does in his argument from reason in *Miracles*. Naturalism denies free will and thus objective ethics, and objective ethics proves free will and disproves naturalism. In the words of C.E.M. Joad: ‘the conviction that some things... are positively evil carries with it the consciousness that the things *ought* not to be done... and the consciousness of *ought* carries with it in its turn... the consciousness of freedom.’¹⁰⁴

Stock’s Self-Abolition

Gregory Stock says that genetic engineering should force us to wrestle with the question of what it means to be a human being. His answer to this question is that humans are the outcome of an unintended naturalistic evolutionary process who, possessed of a scientific turn of mind, have developed the inevitably deployed power to take over their own evolution where Nature left off, and to direct it towards ‘the goals we value’.¹⁰⁵ (Not the goals we objectively *ought* to value. The questions of what goals we *ought* to value, and what metaphysical worldview is implied by the existence of a moral ought, doesn’t seem to occur to Stock.) While Stock admits that gene-line manipulation ‘would replace the hand of an all-knowing and almighty Creator with our own clumsy fingers and instruments’, and thereby ‘trade the cautious pace of natural evolutionary change for the careless speed of high technology... flying forward with no idea where we were going and no safety net to catch us’,¹⁰⁶ for him there is no Creator to worry about or to replace. We must simply do our best to channel man’s inevitable conquest of nature: ‘If... we admit that we don’t know where we are headed, maybe we will work harder to ensure that the process itself serves us, and in the end that is what we must count on.’¹⁰⁷ Ironically, Stock begins one of his chapters with the following quotation from Lewis Carroll’s *Alice in Wonderland*:

‘Cheshire Puss,’ she began... ‘Would you tell me, please, which way I ought to go from here?’ ‘That depends a good deal on where you want to get to,’ said the Cat. ‘I don’t much care where-’ said Alice. ‘Then it doesn’t matter which way you go,’ said the Cat.’

As Lewis noted, ‘Progress means not just changing, but changing for the better.’¹⁰⁸ Stock envisages a process of self-directed human evolution that ‘serves us’.¹⁰⁹ Lewis would point out that such manipulation of future generations serves the ends of the present generation but not the ends of future generations, and that the manipulation will be something done by a minority of men to a majority of men.

Stock equivocates over who, or what, is ultimately in charge of this ‘self-directed human evolution’: ‘In a sense, germline manipulation is biology’s bid to keep pace with the rapid evolution of computer technology.’¹¹⁰ Human choice has here been replaced with an anthropomorphosized Biology – a shift Stock probably doesn’t notice because he thinks that human beings just are human biology (and human biology an accidental part of biology in general). This is exactly as Lewis warned, that ‘Man’s conquest of Nature’ would in the end be ‘Nature’s conquest of Man’.

Stock writes that: ‘To figure out which traits we will want for our children once we have the power to make such choices, we must think long and hard about who we are’¹¹¹; but this is empty rhetoric, because Stock has a clear assumption about what human beings are: ‘Our evolutionary past speaks to us through our biology and fashions our underlying desires and drives. Our urges are those that best enabled our ancestors to produce as many children as possible and ensure that those children go on to do the same.’¹¹² One might ask, as Alvin Plantinga (following in Lewis’ footsteps) has asked with considerable subtlety and power, whether such a view of human nature is compatible with the assumption that the human way of thinking about reality, especially in the abstract realm of scientific theorising, is reliable.¹¹³ Then again, such an account of human cognition appears to have a problem in that, as Lewis noted, it appeals to *causal* explanations at the expense of *logical* explanations.¹¹⁴ Be that as it may, Stock’s argument is beginning to sink into a slough of determinism, for:

any combination of personality and temperament that predisposes people to embrace biological selection and enhancement will be highly represented among those who use germline choice. To the extent that the personality attributes that lead to this are genetic in nature, the technology is likely to reinforce them in successive generations. Enhanced humans will manifest and reinforce their philosophy in their biology.¹¹⁵

In other words, there will be a genetic snowball effect that could wrest ‘self directed human evolution’ out of human hands. As Lewis warned, man’s gaining of power over himself ironically means a *restiction* of man’s power:

At the moment, then, of Man’s victory over Nature, we find the whole human race subjected... to that in themselves which is purely ‘natural’ – to their irrational impulses... Man’s conquest of Nature turns out, in the moment of its consummation, to be Nature’s conquest of Man. Every victory we seemed to win has led us, step by step, to this conclusion... What looked like hands held up in surrender was really the opening of arms to enfold us for ever...

We reduce things to mere Nature *in order that* we may conquer them... The price of conquest it to treat a thing a mere Nature... As long as this

process stops short of the final stage we may well hold that the gain outweighs the loss. But as soon as we take the final step of reducing our own species to the level of mere Nature, the whole process is stultified, for this time the being who stood to gain and the being who has been sacrificed are one and the same. This is... the magician's bargain: give up the soul, get power in return. But once our souls, that is, ourselves, have been given up, the power thus conferred will not belong to us. We shall in fact be slaves and puppets of that to which we have given our souls... if man chooses to treat himself as raw material, raw material he will be: not raw material to be manipulated, as he fondly imagined, by himself, but by mere appetite, that is, mere Nature...¹¹⁶

Stock admits that since 'We cannot know where self-directed evolution will take us, nor hope to control the process for very long'¹¹⁷, this process will lead to the dissolution of what the 'we' this process is meant to serve actually are: 'future generations will not want to remain "natural" if that means living at the whim of *advanced creatures to whom they would be little more than interesting relics from an abandoned human past.*'¹¹⁸ Stock acknowledges: 'In offering ourselves as vessels for potential transformation into we know not what, we are submitting to the shaping hand of a process that dwarfs us individually.'¹¹⁹ Thus, the natural process Stock wants us to embrace on the basis of its *benefits to us* in supposedly enhancing *our* human nature dwarfs the nature of its supposed directors in such a way that they will be swallowed up by the process they inaugurated (or which Nature inaugurated through them); and, in rejecting God, man fails to acknowledge any objective basis for thinking that the proposed beneficial enhancements are an objectively good thing in the first place! On the other hand, if we admit the existence of God, then a normative and sacred human nature that should be received rather than used is thereby established, a conclusion that should at least dampen our enthusiasm for evolving ourselves off the cosmic scene.

Conclusion

'Denial... of the idea that there is something unique about the human race that entitles every member of the species to a higher moral status than the rest of the natural world – leads us down a very perilous path... Nietzsche is a much better guide to what lies down that road than the legions of bioethicists and casual academic Darwinians that today are prone to give us moral advice on this subject.' – Francis Fukuyama¹²⁰

Fukuyama is right to object to genetic engineering on the basis that it might lead to the abolition of man, for such an outcome renders Stock's advocacy of eugenics moot in so far as it is based on an appeal to self-interest. And self interest is all Stock has left after rejecting God. However, if Stock were to ask Fukuyama, 'What's so special about man in this godless universe that we ought to preserve him?', I don't see how he could make a sufficient reply without abandoning his assumption that God doesn't exist. An essential human nature may be a necessary condition of human rights, but in the absence of God, it does not seem to be a sufficient condition. Nor, in the absence of God, can one say that this essential human nature is an objectively good thing that ought to be preserved because its existence is part of God's intention for His creation. Without acknowledging a Creator it is impossible to justify belief in the special value of human nature that motivates much biomedical research, to define human nature in a normative way, or to judge any proposed 'enhancement' to human

nature as being objectively good. Genetically engineered humans are a possibility, but not an inevitability. The end product of genetically engineering humans may or may not be genuinely 'post human', but even the chance that eugenics could lead to 'the abolition of man' is reason enough to oppose it. 'To avoid following [the road of human genetic engineering],' says Francis Fukuyama, 'we need to take another look at the notion of human dignity, and ask where there is a way to defend the concept against its detractors that is fully compatible with modern natural science but that also does justice to the full meaning of human specificity.'¹²¹ Fukuyama says, 'I believe there is.'¹²² But his way contains (at least) two self-contradictions. The theism underlying Lewis' thought provides the only viable foundation for objecting to the reductionistic abolition of man advocated by Stock, who sees people as unintended objects that can be used as things rather than being received as art.

There is, however, a kernel of truth to be found in Stock's unguided faith in the future; the longing for a better world. For all the good and beautiful aspects of this present reality, in our heart of hearts we long for something more. Paradoxically, the longing for that 'something more' is brought into focus most sharply, not by the experience of pain and suffering, but by the experience of beauty. The search for that transcendent something sensed within or through aesthetic experience was a golden-thread running through C.S. Lewis' life. He picked up on the Romantic term *Sehnsucht* to describe a family of emotional responses to the world that are linked by a combined sense of longing for, and displacement or alienation from, the object of desire. *Sehnsucht* is 'nostalgic longing', and it arises when experience of something within the world, particularly beauty, awakens in us a desire for something beyond what the natural world can offer as a corresponding object of desire. *Sehnsucht* directs our attention towards the transcendent, that which 'goes beyond' our present experience. As Lewis warns: 'The books or the music in which we thought the beauty was located will betray us if we trust them; it was not *in* them, it only came *through* them, and what came through them was longing... Do what we will, then, we remain conscious of a desire which no natural happiness will satisfy.'¹²³ There is beauty *in* books and music as there is in nature; but these things stir within us a desire for a beauty greater than themselves that we seem to apprehend *through their beauty*. It is as if their finite beauty is a derived quality that draws our aesthetic attention into a platonic heaven of un-derived and absolute beauty:

We do not want merely to see beauty, though, God knows, even that is bounty enough. We want something else which can hardly be put into words – to be united with the beauty we see... to receive it into ourselves... to become part of it... At present we are on the outside of the world, the wrong side of the door. We discern the freshness and purity of morning, but they do not make us feel fresh and pure. We cannot mingle with the splendours we see. But all the leaves of the New Testament are rustling with the rumour that it will not always be so. Some day, God willing, we shall get *in*. When human souls have become as perfect in voluntary obedience as the inanimate creation is in its lifeless obedience, then they will put on its glory, or rather that greater glory of which Nature is only the first sketch.¹²⁴

In the final analysis, perhaps the problem with eugenics is impatience. Trying to run before you can walk has never been a recipe for happiness.

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 - 21 David Hume, *On the Standard of Taste*.
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 - 25 *ibid*, p. 11-12.
 - 26 Anthony O'Hear, *Beyond Evolution*, p. 191.
 - 27 C.E.M. Joad, *The Recovery of Belief*, p. 145.
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