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PHILOSOPHICAL ARGUMENTS FOR AND AGAINST HUMAN REPRODUCTIVE CLONING

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ABSTRACT

Can philosophers come up with persuasive reasons to allow or to ban human reproductive cloning? Yes. Can philosophers agree, locally and temporarily, which practices related to cloning should be condoned and which should be rejected? Some of them can. Can philosophers produce universally convincing arguments for or against different kinds of human cloning? No.

This paper analyses some of the main arguments presented by philosophers in the cloning debate, and some of the most important objections against them. The clashes between the schools of thought suggest that philosophers cannot be trusted to provide the public authorities, or the general public, a unified, universally applicable view of the morality of human reproductive cloning.

Some people, mostly legislators, have thought that prohibitions on cloning can be based on philosophical arguments, that is, arguments which are ultimately founded on the ability of all human beings to use reason, or their intellectual faculties.[1] Others have thought that the reverse is the case – that such prohibitions can be conclusively rejected by philosophical arguments.[2]

[1] G.J. Annas, L.B. Andrews & R.M. Isasi. Protecting the Endangered Human: Toward an International Treaty Prohibiting Cloning and Inheritable Alterations. *American Journal of Law & Medicine* 2002; 28: 151–178; P.F. Frisneda. Clonación Humana: Una Lucha Contra el Tiempo. *Tiempos del Mundo* 2002; September 5–11.

[2] J. Harris. 'Goodbye Dolly?' The Ethics of Human Cloning. *Journal of Medical Ethics* 1997; 23: 353–360; J. Harris. 1998. *Clones, Genes, and Immortality.* Oxford. Oxford University Press; J. Savulescu. Should We Clone Human Beings? Cloning as a Source of Tissue for Transplantation. *Journal of Medical Ethics* 1999; 25: 87–95; J. Savulescu. The Ethics of Cloning and Creating Embryonic Stem Cells as a Source of Tissue for Transplantation: Time to Change the Law in Australia. *Australian and New Zealand Journal of Medicine* 2000; 30: 492–498.

My aim in this paper is to show that both these groups are wrong, and that philosophy, or reason, does not provide sufficient grounds for settling the cloning issue in a way that should be reasonably accepted by all people in all cultures and schools of thought. If governments want to ban the practice in its entirety, or to allow it in its entirety, they should recognise that the justification for such a decision must be sought elsewhere.

THE QUESTIONS

There are many arguments *against* human reproductive cloning, but only one *in favour* of it. The one argument for the practice is easy to state and easy to support initially, but difficult to defend conclusively. Its simplest formulation is:

> Human reproductive cloning is likely to actualise some value, and all arguments that can be presented against it are either invalid or unsound.

I will explore, in this paper, how this argument can be explicated, supported, and defended against philosophical criticisms levelled at it. I will proceed by answering five questions, namely:

- What is human reproductive cloning?
- What values is it likely to actualise?
- What sorts of outcome-based arguments can be presented against it?
- What sorts of 'deontological' arguments can be presented against it?
- What sorts of 'teleological' arguments can be presented against it?

I will then conclude by summarising what I see as the limitations of philosophical arguments in the cloning debate.[3]

[3] A word of caution is appropriate here. There are two common mistakes in cases like this, and we should try to avoid both. On the one hand, some people may think that since there are so many arguments against human reproductive cloning, *one of them must be sound*. This, of course, does not follow. No matter how many objections there are to a given practice, they can all, logically speaking, be mistaken. On the other hand, others may think, conversely, that since many arguments against human reproductive cloning are weak, inadequate, and unconvincing, *none of them can be sound*. This is equally untrue. Even if the first fifty objections to a practice were misplaced, argument number fifty-one could still be good. (This is why it is so difficult to defend any controversial policy or course of action conclusively – I can make a solid case today, but tomorrow someone may come up with a lethal criticism.)

WHAT IS HUMAN REPRODUCTIVE CLONING?

There are many ethically interesting forms of human cloning, and not all of them are reproductive. These include:

- the splitting of early human embryos for pre-implantation genetic tests (this is not usually thought of as cloning at all);
- the production (that is, the isolation and *in vitro* multiplication) of human stem cells, which may have the ability to develop into full-fledged human beings (this is sometimes but not always associated with cloning in other senses); and
- the creation of babies by the use of somatic cell nuclear transfer techniques (in which case the new individual roughly duplicates the genome of only one of its parents, instead of bringing together, for the first time, the genomes of two parents, which is the norm in sexual reproduction).

I will concentrate here on the third form, human reproductive cloning, which became topical a few years ago with the successful cloning of other mammals. To my knowledge, nobody has so far produced babies by this method, but laboratories in many parts of the world have announced that work is under way to complete the procedure.[4]

Some opposition to human cloning is based on mistaken beliefs regarding the result of the procedure, once completed. Contrary to popular belief, the method will not create copies of existing human beings. Genetically speaking, it comes very close to creating a later identical twin to an already existing individual. Socially and psychologically speaking, it produces an entirely new individual, whose biological features just happen to be quite similar to somebody else's.

WHAT VALUES IS HUMAN REPRODUCTIVE CLONING LIKELY TO ACTUALISE?

Depending on their ethical views, defenders of cloning can say that it would be valuable in at least three ways.

In the first instance, it would help childless couples and individuals to have children 'of their own' in a genetic sense that has always been important to people. It would thereby meet needs, fulfil desires, satisfy preferences, promote well-being, and reduce suffering. These values are particularly important to philosophers

[4] J.B. Cibelli, R.P. Lanza, M.D. West & C. Ezzell. The First Human Cloned Embryo. *Scientific American* 2002; 286: 44–51.

who think that the outcomes, or consequences, of our actions are the only or primary consideration in our ethical decision making.

Secondly, since cloning would promote the well-being of some individuals without violating anybody's autonomy as a person, all rational agents ought to (at least) condone it, and (possibly even) think that it is their duty to encourage it. The value of personal self-governance, or self-determination, underlying this line of thinking has often been emphasised by traditions in which the liberty and freedom of individuals is seen as important. This idea has also been incorporated in international declarations which state that people's reproductive choices should not be interfered with.

Thirdly, reproduction can be counted among the 'natural inclinations' that human beings have, which means that it is 'natural' (and therefore presumably good) to try to produce offspring by any means available to humanity. This is basically the argument evoked by scientists who want to experiment with cloning. Technology, according to this view, may add an element of artificiality to reproduction, but this should not be a cause of concern (because, after all, most things people do in modern societies are more or less removed from nature, traditionally perceived).

In sum, the values actualised by human reproductive cloning can include human *well-being*, personal *autonomy*, and the satisfaction of our *natural inclinations*. Not everybody, however, thinks that this is the whole story. So let me proceed to the arguments presented against the practice.

WHAT SORTS OF OUTCOME-BASED ARGUMENTS CAN BE PRESENTED AGAINST HUMAN REPRODUCTIVE CLONING?

Appeals to the harmful outcomes and consequences of our actions take many forms, depending on:

- the definition of 'harm' employed;
- the degree of directness expected; and
- the extent of certainty required.

Let me explain what I mean by sketching the main variations on this theme, and their implications for cloning.

John Stuart Mill, the nineteenth-century English utilitarian, believed that laws and social policies should be devised to prevent harm to innocent third parties. His starting point was that people ought to be left free to do whatever they like, as long as they do not harm others by their actions. If competent individuals want to hurt themselves, or agree to be hurt by others, their actions

should not be restricted in the name of 'their own best interest', or in the name of 'rationality', or 'morality.' If they do not harm others, their liberty should not be interfered with.[5]

Mill recognised that people can be harmed psychologically as well as physically, and indirectly as well as directly, but for legal purposes, he argued for a narrow understanding of harm. Since people can be irrationally offended by other people's doings, and since it is difficult to assess the long-term consequences of our actions, he thought that only the concrete and relatively immediate infliction of harm should be publicly regulated.[6]

The Millian view on liberty and harm gives rise to three norms as regards human reproductive cloning:

- Since the technique is, as experiments with other mammals show, unsafe, the production of babies by cloning should not, for the time being, be allowed.
- Since, however, research on freely donated embryos, where no new individuals are born, does not harm anybody, it should be allowed.
- And if, in the future, the technique becomes reasonably safe, then the production of new individuals by cloning should also be permitted.

Other 'outcome-oriented' ethicists have, however, thought that Mill's notion of harm is too limited. Even Mill himself conceded that our actions and policy choices could have effects which are indirect, or cumulative, or which will only be felt in the future. And he understood that our actions could cause offence, anguish, and mental suffering (which may be difficult to assess but none the less real). So why regulate only actions which lead to immediate physical damage?

Some contemporary followers of Mill seem to think that if only 'irrational people' in 'irrationally organised societies' would be hurt by the policies they advocate, this can be ignored.[7] But this is not a legitimate move in genuinely consequentialist, or outcome-based, models. If people's attitudes and social structures cannot be changed without causing more harm than benefit, then they should be taken on board in ethical assessments like any other facts.

[5] J.S. Mill. 1996. *On Liberty* (1859). In *On Liberty and The Subjection of Women.* Ware, Hertfordshire. Wordsworth: p. 13.

[6] Ibid. pp. 14–15.

[7] Harris (1998), *op. cit.* note 2; J. Savulescu. The Embryonic Stem Cell Lottery and the Cannibalization of Human Beings. *Bioethics* 2002; 16: 508–529.

An extended definition of harm, then, would include psychological and indirect damage,[8] and its acceptance could imply stricter norms than the Millian notion.

- If the expected benefits of research into cloning are small, and if the practice would cause considerable grief to a large number of people, then it should probably be banned – at least for now.
- And this, of course, would mean that the production of babies by cloning will not be safe in the near future, and cannot, therefore, be condoned.

The other side of the coin is that if illegal research into cloning cannot be stopped, and if this activity, with its unavoidable side effects, causes more suffering than legal research, then the practice should be permitted even if it is offensive. Genuinely outcome-based analyses can always, in principle, yield a variety of results, depending on the facts of the case and their interpretation.

Still others have thought that the definition of 'harm' should be extended even wider, to include moral, spiritual, or symbolic values, and consequences that cannot, for the time being, be foreseen by those making the decisions.[9] The values exceeding physical and mental well-being, such as *autonomy* and *dignity*, can, however, be more properly discussed in the context of 'deontological' and 'teleological' theories. And although widely acclaimed anti-technological rules like the *precautionary principle* seem to make appeals to unforeseen and unforeseeable consequences, they are not really based on outcomes – it would, after all, be difficult to assess actions by consequences we know nothing about.

So let me turn to the other types of reasoning prevalent in contemporary debates.

WHAT SORTS OF 'DEONTOLOGICAL' ARGUMENTS CAN BE PRESENTED AGAINST HUMAN REPRODUCTIVE CLONING?

The most prominent theoretical source of objections in the 'deontological' school of thought is the moral philosophy of

[8] Cf. J. Feinberg. 1984. *Harm to Others*. Oxford. Oxford University Press.

[9] Cf. M. Häyry & T. Takala. Genetic Engineering and the Risk of Harm. *Medicine, Health Care and Philosophy* 1998; 1: 61–64; M. Häyry. Forthcoming. Precaution and solidarity. In *The Foundations of Health Care*. D. Thomasma, D. Novak & D. Weisstub, eds. Dordrecht. Kluwer Academic Publishers.

Immanuel Kant, the German eighteenth-century thinker who stressed the ideas of 'transcendental' freedom and autonomy.[10]

To define his idea of the transcendental autonomy of human reason, Kant presented several formulations of what he called the 'categorical imperative.' This is the moral law that he thought people should obey without exceptions. I will outline, in the following, the general idea and two specific formulations of this overarching rule, and see how they can (or cannot) be employed in objections to human reproductive cloning.

The general idea is:

> Since we can be genuinely free, or autonomous, only in the realm of reason, or intellect, we should always do what is rational.

In a sense, this is Kant's idea, but in its general form it is not particularly helpful in practical debates. This is because some people say that it would be *rational* to ban cloning; while others say that it would be *irrational* to do so; and since, in the absence of specifications, this disagreement cannot be solved, the discussion simply grinds to a halt.

Kant's first formulation, which is of more use, was:

> Act only according to that maxim whereby you can at the same time will that it should become a universal law.[11]

This means that if I set a rule for my own behaviour, I must also accept that everybody else will follow that same rule.

An argument against cloning can be built on this principle, as follows. If I decide to produce offspring by cloning, then I must accept that everybody else will also do the same. But if cloning becomes the only form of human reproduction, then the human gene pool will start to shrink. And since genetic diversity is good, this should not be allowed to happen.

[10] R.J. Sullivan. 1989. *Immanuel Kant's Moral Theory*. Cambridge. Cambridge University Press; H.E. Allison. 1990. *Kant's Theory of Freedom*. Cambridge. Cambridge University Press. The word 'transcendental' means 'beyond the limits of experience and knowledge', so the freedom and autonomy in question have next to nothing to do with liberty, self-determination, and self-governance as they are understood in other traditions and ordinary language. See: J.B. Schneewind. 1998. *The Invention of Autonomy: A History of Modern Moral Philosophy*. Cambridge. Cambridge University Press.

[11] I. Kant. 1994. *Grundlegung zur Metaphysik der Sitten* (1785, § 421). Translated by J.W. Ellington. Reprinted in *Ethical Philosophy*. Second edition. Indianapolis and Cambridge. Hackett Publishing Company: 30.

I am not quite sure how this objection should be interpreted, even assuming that I have presented it correctly in the first place. But I think two readings should be distinguished.

One is to say that genetic diversity is good, because it is likely to promote human well-being. It has, in the past, helped humankind to survive diseases and changes in the natural environment, and will presumably continue to do so in the future. This definition of the goodness of genetic diversity does make some sense, but it does not support the Kantian objection to cloning. We can permit cloning in cases where people cannot have children by any other means without allowing it to become the only way of making babies – and without disturbing the human gene pool in any way. Besides, it could be argued that whatever accidental advantages the variety of genetic constitutions has had in the past could in the future be secured by considered genetic enhancements.

The more Kantian way to proceed is to say that genetic diversity is good, because it is natural, or intrinsically linked with human reproduction.[12] The starting point here would be that human (sexual) reproduction naturally results in a combination of two new genomes. Cloning, according to its defenders, is an assisted form of human reproduction. But since it does not combine two new genomes (which would result in increased genetic diversity), it defies the natural purpose of reproduction, and therefore contradicts itself. And since we cannot, according to the categorical imperative, accept self-contradictory rules, we must not allow cloning.

The critical element in this argument, which does presuppose a rather strong commitment to the Kantian model, is the use of the term 'natural.' I will return to this briefly in the context of 'teleological' arguments.

Kant's second formulation of the categorical imperative was:

> Act in such a way that you treat humanity, whether in your own person or in the person of another, always at the same time as an end and never simply as a means.[13]

Some people have argued that cloning violates this rule by treating the humanity of the individuals produced 'simply as a means.'

[12] I. Kant. 1994. *Metaphysische Anfangsgründe der Tugendlehre* (1797, § 7). Translated by J.W. Ellington. Reprinted in *Ethical Philosophy*. Second edition. Indianapolis and Cambridge. Hackett Publishing Company: 85.

[13] Kant, *op. cit.* note 12, § 429, p. 36.

They have said that the *autonomy* and *freedom* of the new individuals are endangered by the procedure. They have also said that the standing of these individuals as *persons* would be jeopardised. And they have said that cloning violates *human dignity*.[14]

It is difficult to see what the point of these arguments is. Presumably, people produced by cloning (if it could be made safe) would be as free and autonomous as people produced by more traditional methods, they would be as valuable as persons, and they would possess the same dignity as anybody else.[15] At least, this is true if we are talking about people as bodies and minds that can be empirically observed.

But maybe the situation is different, if people are seen primarily as spiritual beings. A look at the third line of ethical thinking can cast some light on this.[16]

[14] A. Kahn. Clone Mammals . . . Clone Man. *Nature* 1997; 386: 119; K. Labib. Don't Leave Dignity out of the Cloning Debate. *Nature* 1997; 388: 15; R. Williamson. Human Reproductive Cloning is Unethical because it Undermines Autonomy: Commentary on Savulescu. *Journal of Medical Ethics* 1999; 25: 96–97.

[15] Cf. M. Häyry. 1994. Categorical Objections to Genetic Engineering – A Critique. In *Ethics and Biotechnology*. A. Dyson & J. Harris, eds. London and New York. Routledge: 202–215; M. Häyry & T. Takala. 2001. Cloning, Naturalness and Personhood. In *Personhood in Health Care*. D.C. Thomasma, D.N. Weisstub & C. Hervé, eds. Dordrecht, Boston and London. Kluwer Academic Publishers: 281–298.

[16] I should mention, at this point, some other deontological possibilities that are not explored here. One is to say that embryos used in research leading to cloning babies would be treated as a mere means. This, I suppose, is true, but in what sense are they persons? Another is to say that women, who would in some cultures be reduced to producing 'copies' of men, would be treated merely as a means. This, again, is true, if the women in question are coerced into doing what they do. But this point applies to all coerced human reproduction, and can be directed against lack of sexual education and restrictive abortion policies, as well. It is not a specific argument against cloning. Yet another deontological option would be to abandon the Kantian model of intellectual individualism, and to say that our *emotions* and *feelings* provide a reason against cloning, or that *society* would collapse with the acceptance of cloning. I have examined this line of thinking in more detail elsewhere, and concluded that it probably does not provide a valid justification for a total ban on cloning. (M. Häyry. 2003. Deeply Felt Disgust – A Devlinian Objection to Cloning Humans. In *Ethical Issues in New Genetics: Are Genes Us?* B. Almond & M. Parker, eds. Aldershot. Ashgate: 55–67.) Finally, it has been argued that it would be *unjust* to pursue high-tech solutions to minor medical problems in a world of poverty and other more basic issues. While this is a tenet easy to agree with, proponents of cloning have countered it by noting that research into cloning can be the key to many medical advances in the future. (R. Winston. 1999. Cloning Technology will Yield Medical Benefits. In *Cloning: For and Against*. M.L. Rantala & A.J. Milgram, eds. Chicago and La Salle. Open Court.)

WHAT SORTS OF 'TELEOLOGICAL' ARGUMENTS CAN BE PRESENTED AGAINST HUMAN REPRODUCTIVE CLONING?

I have already mentioned that some ethical concepts remain enigmatic in the context of outcome-based and deontological theories. These include:

- personhood;
- humanity;
- human dignity;
- transcendental freedom; and
- naturalness.[17]

Many authors have thought that they can bring these together and explain them within 'teleological' theories which combine elements of the ethical teachings of Plato, Aristotle, and some early Christian 'Church Fathers.' The core of these theories is the belief that human beings have a natural *essence* or *goal* (*telos*) which they are supposed to fulfil or strive for in order to be genuinely human. Among the natural human goals in these views are survival and reproduction, but objections usually focus on our essence as *spiritual beings*.[18]

Within this model, arguments against cloning assume the following form:

- Human beings have an essence, and it would be wrong to violate it.
- Cloning would violate it.
- Therefore, cloning would be wrong.

There are at least two official documents that have made direct appeals to the teleological argument.

The German Enquete Commission stated in its Report to the German Bundestag in 1987:

> The starting-point of every evaluation must be that the humanity of human beings rests at its core on natural development,

[17] Cf. M. Häyry. Another Look at Dignity. *Cambridge Quarterly of Healthcare Ethics* forthcoming; T. Takala. The (Im)morality of (Un)naturalness. *Cambridge Quarterly of Healthcare Ethics* forthcoming.

[18] T. Aquinas. 1988. *On Law, Morality and Politics*. W.P. Baumgarth & R.J. Regan, eds. Indianapolis and Cambridge. Hackett Publishing Company: 47–48; Pontificia Academia Pro Vita. 1997. *Reflexions on Cloning*. Vatican City. Libreria Editrice Vaticana; Human Cloning – Position paper of the Catholic Medical Association. *Issues in Law and Medicine* 2000; 15: 323–324; P.T. Schotsmans & B. Hansen. Cloning: The Human as Created Co-creator. *Ethical Perspectives* 2001; 8: 75–87.

> not on technical production and not on a social act of recognition. The dignity of human beings is based essentially on their being born and on the naturalness of their origins, which all humans share with each other . . . The fact that human beings are not the project and the planned experiment of their parents, but are the product of the chance of nature, secures the independence of human beings from each other, their individual worth . . . [To] make the formation of our genotype . . . dependent on the caprice of other people is incompatible with the essence of a free person.[19]

In this document, the humanity, dignity, and freedom of human persons is linked with the 'naturalness of their origins', which would be violated by practices like cloning.

Dignity and humanity are also central concepts in UNESCO's 1997 *Universal Declaration on the Human Genome and Human Rights*, which asserts:

> The human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity. In a symbolic sense, it is the heritage of humanity . . . Everyone has a right to respect to their dignity and for their rights regardless of their genetic characteristics . . . That dignity makes it imperative not to reduce individuals to their genetic characteristics and to respect their uniqueness and diversity . . . Practices which are contrary to human dignity, such as reproductive cloning of human beings, shall not be permitted.[20]

This declaration has attracted immediate attention, and is widely seen as the most authoritative defence of humanity against excessive genetic interventions.[21]

The critical point in the teleological model is to define convincingly the 'human essence', and to explain how exactly it would be disrespected, or violated, by reproductive cloning. The quoted documents, it can be argued, *declare* that cloning, as an

[19] A Report from Germany – an extract from *Prospects and Risks of Gene Technology: The Report of the Enquete Commission to the Bundestag of the Federal Republic of Germany. Bioethics* 1988; 2: 256–263, at 257. The latter passage is quoted in the report from: R. Loew. Gentechnologie: vom Können zum Dürfen – philosophische Überlegungen. *Die Neue Ordnung* 1984; 38: 176 ff.

[20] Adopted by the General Conference of UNESCO at its 29th session on 11 November 1997, articles 1, 2, 11. On the significance given to the document, see, e.g.: C. Dennis, R. Gallagher & P. Campbell. Everyone's Genome. *Nature* 2001; 409: 813.

[21] Dennis et al., *op. cit.* note 20.

'unnatural' or 'reductive' practice, goes against the dignity, humanity, uniqueness, and freedom of persons. But they do not specify the notions of dignity, humanity, uniqueness, or freedom. Nor do they explain how these would be attacked by cloning, but not by more conventional modes of reproduction. If, for instance, people are allowed to choose with whom they want to bear children, then human planning and caprice have already entered the process. And if, in addition, people are permitted to make reproductive choices based on the medical histories of each other's families, then the reduction of individuals to their genetic characteristics has surely begun.[22]

THE LIMITATIONS OF PHILOSOPHICAL ARGUMENTS

Do we have reason to believe that the philosophical arguments I have presented, or other arguments I may have overlooked, can provide conclusive grounds for legislation on cloning in either the pluralistic societies of the affluent West, or the more traditional societies of the rest of the world? I do not think so.

The main philosophical arguments for and against human reproductive cloning proceed from many conflicting background assumptions, which means that people who disagree on the definition or relevance of harm, or the nature and role of human dignity and autonomy, will not be able to agree on the universal validity of any given policy.

Local and temporary consensus is, of course, possible on the practical level. None of the arguments I have examined would

[22] One way to contrast some prevalent consequentialist and teleological views is to draw attention to their different notions of 'harm' and 'personhood.' The standard utilitarian reading is that harm can only be inflicted mentally or physically on sentient living beings. Personhood, in this model, belongs automatically to all beings who are mentally alert enough to be aware of their own subjective existence over time. If cloning produces healthy babies (prospective persons) without inflicting concrete harm on others, it should be approved. But some teleological ethicists, including the ones quoted in the text, seem to be more worried about spiritual damage to the human soul. According to them, people can harm themselves by acting in ungodly ways. One such way would be the production of new human beings by cloning. I am no expert in these matters, but I can think of two partly overlapping reasons for this. If personhood is inexorably connected with an immortal soul, and if immortal souls can only be issued by God, then cloners would risk bringing into this world people without the essential equipment for personhood. And even if God guaranteed that clones, too, have souls, cloning could be construed as an arrogant attempt to force God's hand. The (theologically perplexing) idea in the latter case would be that God somehow plans 'natural reproduction', whereas 'unnatural' reproductive practices take him by surprise.

condone reproductive human cloning now, and very few of them would support unlicensed research into reproductive human cloning before more is known about the biological mechanisms and cultural issues involved. This consensus could be used as a basis for restricted moratoriums and regulations.

Even here, however, we should not be lulled into thinking that the practical consensus is a sign of an underlying, shared rationality. It is a happy constellation of many different rationalities which, given the chance, will start pulling their advocates in different directions again. Furthermore, even the many rationalities reflected in the foregoing philosophical arguments do not begin to exhaust the ways in which cloning can be seen in those parts of the world not excessively influenced by European thinking.

Philosophical arguments can be employed to encapsulate ethical positions and standpoints, and this can further discussion between people who hold conflicting views. But they cannot be employed to justify universal policies on controversial issues like human reproductive cloning. Philosophy is ultimately an uncompromising discipline, whereas political decisions in the real world are often, of necessity, compromises between competing and radically incompatible views.

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