Abstract

Two major international instruments purport to ban human reproductive cloning (HRC) on the grounds that it is an affront to human dignity. A third, binding, international convention is planned. What does the concept of human dignity actually mean in international and constitutional law? Is HRC really incompatible with dignity? This article develops a key working model of our contemporary understanding of human dignity. Three different concepts of dignity give rise to the two major perspectives of subjective dignity and objective dignity. Analysis of HRC in the context of the model reveals conflicting results. Nonetheless, when considering the point of view of objective dignity, together with the possible motivations behind HRC, a defensible, conceptual argument can be made for grounding an international convention in dignity-based language.

Deux instruments internationaux majeurs ont pour objet d'interdire le clonage humain à des fins de reproduction (HRC, human reproductive cloning) lorsqu'il va à l'encontre de la dignité humaine. Une troisième convention internationale prohibant cette pratique devrait voir le jour. Quel est le poids réel du concept de dignité humaine en droit international et constitutionnel ? Le clonage reproductif humain est-il véritablement incompatible avec la dignité ? Cet article décrit un modèle valide capital de la perception contemporaine de la notion de dignité humaine. Trois approches distinctes de la dignité conduisent aux deux principales perspectives de dignité subjective et objective. L'analyse du clonage reproductif humain dans le contexte de ce modèle met en évidence des résultats conflictuels. Qui plus est, si l'on se place du point de vue de la dignité objective en tenant compte des motivations possibles du clonage reproductif humain, un argument conceptuel valable peut émerger, permettant d'élaborer une convention internationale autour de la notion de dignité.

En el presente existen dos instrumentos internacionales importantes que prohíben la clonación humana con fines reproductivos (CHR), argumentando que esta va en contra de la dignidad humana. Una tercera convención restrictiva está siendo planeada. ¿Qué significa el concepto de dignidad humana en el contexto de las leyes internacionales y de la constitución? ¿Es la CHR verdaderamente incompatible con la dignidad humana? Este artículo desarrolla un modelo clave de nuestra comprensión contemporánea de lo que es la dignidad humana. Tres conceptos distintos de dignidad resultan en dos perspectivas principales acerca de la dignidad: dignidad subjetiva y dignidad objetiva. Al analizar la HRC dentro del contexto del modelo se encuentran resultados conflictivos. Sin embargo, cuando se considera el punto de vista de la dignidad objetiva, junto con las posibles motivaciones detrás de la CHR, se puede construir un argumento conceptual válido para fundamentar una convención internacional que use un lenguaje basado en la dignidad.

HUMAN DIGNITY AND HUMAN REPRODUCTIVE CLONING

Steven Malby

he complexities and arguments both for and against human reproductive cloning (HRC) seem to have been discussed in almost every sphere imaginable. The worlds of law, medicine, science, bioethics, philosophy, and religion have all laid claim to the forum or framework in which the issues should be discussed.

While public debate and the responses of national governments have been fuelled and informed by multidisciplinary deliberation, the reaction of the international community—particularly the United Nations (UN) system—has tended to address the question of HRC within a structure developed from rights and UN Charter-based language. The (declaratory) 1997 Universal Declaration on the Human Genome and Human Rights (UDHGHR) and the (binding) Council of Europe Additional Protocol to the Convention for the Protection of Human Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine (CoE Protocol) both purport to ban HRC because it is contrary to human dignity, rather than using the more common, ethical argument of a"harms and benefits" analysis. 1,2 Clearly, both the UDHGHR and the CoE Protocol have been heavily influenced by existing international human rights law.

Are international human rights standards able to address this complex scientific and societal question however? Can a rights-and-dignity-based framework provide an analysis firm enough to ground an international convention

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on HRC? Human dignity appears in international and domestic law in a number of guises, many of which are potentially at odds with each other. Human rights, such as the right to the highest attainable standard of reproductive health and the right to family life, may also pull on different sides of the cloning debate, giving no clear answers.

Despite the lack of thorough rights-based research, UN General Assembly resolution 56/93 of 12 December 2001 established an ad hoc committee to consider "the elaboration of an international convention against the reproductive cloning of human beings." At its first meeting, the committee noted the need to clarify the "conceptual basis" of the proposed convention.⁴

This article is an attempt to address this issue. Although human dignity is the primary argument in existing instruments for a ban on HRC, the exact reason why this should be so has largely been unexplored. This article develops a key working model of human dignity from three strands of thought found in the existing scientific and legal literature. The model is applied to HRC in an effort to address the question of whether HRC is contrary to dignity, and if so, why this could be the case. Insofar as the discussion aims to lay a conceptual and legal framework of dignity, it has implications for the whole of bioethics, health, and human rights.

It is first necessary, however, to provide a working definition of HRC as it should be understood for the purposes of this article. The definition is taken from the CoE Protocol:

Any intervention resulting in the creation of a human being who shares with another person (whether living or dead) the same nuclear gene set.⁵

This definition has a number of important features. First, an *intervention* is required. "Clones" (persons sharing the same nuclear gene set) may be produced without intervention, as in the case of identical twins. (Identical twins are formed by the [natural—that is, it happens spontaneously, without intervention] splitting of a fertilized egg [a zygote], and the subsequent development of two human beings, each with the same genetic material.) HRC, however, refers to the

situation where an "artificial" intervention is required to create the clone.

Second, the *creation of a human being* is required. This is taken to mean a *born* human being, which excludes discussion on the ethics and human rights of technologies such as therapeutic cloning. The primary aim and result of HRC is procreation. Hence, this article artificially assumes that, after the intervention, the resulting human embryo is implanted and develops to full term without encountering any problems.

Finally, the created human being must share the same nuclear gene set as another person (whether living or dead). Note that the definition is concerned with *nuclear* genetic material. Cloning is achieved by somatic cell nuclear transfer (SCNT), which starts with the removal of the chromosomes from an egg to create an enucleated egg. The chromosomes are then replaced with a nucleus taken from a somatic (body) cell of the individual or embryo to be cloned.6 Factors in the cytoplasm of the enucleated egg have the effect of "reprogramming," or de-differentiating, the transferred nucleus, allowing it to reacquire the full developmental potential of a zygotic (fertilized egg) nucleus, as created by the usual fusion of an egg and sperm cell.⁷ The construct resulting from SCNT, however, also contains small amounts of extra-nuclear DNA, which originate from the egg (mtDNA).8 Thus, strictly speaking, a cloned person would not be 100% genetically identical to the clone source, since that person would not share the same mtDNA (unless a woman were to clone herself and also use one of her own eggs).

SCNT technology was used to create the first cloned mammal—the sheep "Dolly." Such a nuclear transfer experiment has also been performed using an enucleated *human* egg and the nucleus from an adult *human* skin cell. The construct was not implanted but allowed only to develop (apparently normally) to the six-cell stage before it was destroyed.

Existing Relevant Instruments

The UDHGHR was adopted by the 29th Session of the UNESCO General Conference and encompasses five core

principles: (i) respect for human dignity, (ii) nondiscrimination, (iii) prior, free and informed consent, (iv) freedom of research, and (v) the primacy of dignity over research.¹¹ The UDHGHR does not provide a definition of dignity, but a careful reading of the declaration shows that the concept appears in three guises: (i) as the fundamental basis for human rights and a reason to respect rights, (ii) as a right in itself, and (iii) as a specific justification for the impermissibility of certain biotechnological practices, including HRC.¹²⁻¹⁴

Some commentators have referred to such guises, on the one hand, as human dignity acting as empowerment and, on the other, as a basis of rights and human dignity acting as a form of restraint.¹⁵

But even though dignity appears in somewhat competing forms within the UDHGHR, it is used under the guise of a "restraint" to justify a ban on HRC. Invoking dignity in such a way places restrictions on traditional human rights, such as freedom to conduct research and reproductive freedoms (insofar as HRC may be used as a potential means of reproduction).

In a manner similar to the UDHGHR, the CoE Protocol on the Prohibition of Cloning Human Beings also seems to use human dignity as a form of restraint. The preamble to the protocol states: "the deliberate creation of genetically identical human beings is contrary to human dignity," and Article (1) prohibits "any intervention seeking to create a human being genetically identical to another human being, whether living or dead." ¹⁶

If dignity can be used to limit scientific and reproductive freedoms, a logical basis should be identifiable. The model of dignity illustrated below explores whether such a ban can indeed be defensible, based on a contemporary understanding of the term.

Dignity in International and National Law

Human dignity, as used in the preamble of the Charter of the United Nations, does little to explain how dignity is to be interpreted, other than to provide a context of concepts, such as rights, worth, and equality.¹⁷

International instruments, such as the Universal Declaration of Human Rights (UDHR), the International Covenant on Civil and Political Rights (ICCPR), and the International Covenant on Economic, Social, and Cultural Rights (ICESCR), offer a little more guidance. Human dignity is clearly expressed as the foundation of defined human rights. Every human being is considered to possess inherent dignity, and as such, this grounds or accounts for the possession of rights that are inalienable and held equally. This "background" aspect of dignity, however, is also brought specifically into particular human rights and occurs in Articles 22 and 23 of the UDHR, Article 13 of ICESCR, and Article 10 of ICCPR. 18-21 It may be postulated then that while, in some sense, the denial of any right (and particularly a gross, chronic deprivation of rights [as in the case of extreme poverty) violates dignity (since dignity apparently underlies all rights), it is also the case that denying certain rights has particular implications for human dignity.

While nowhere in the International Bill of Human Rights is there an aspiring *right* to dignity per se, the constitutions of various countries, notably those of South Africa and Germany, *do* contain specific rights to dignity. For example, Article 1 of the Constitution of the Federal Republic of Germany states that, "The dignity of the human person is inviolable. To respect it shall be the duty of all public authority."²²

Situations in which a constitutional right to dignity may be violated are often equivalent to those situations in which violations of the "dignity sensitive" human rights occur. However, there are differences. For example, in the German Constitution, the right to dignity is a personal right and can therefore be held only by an *individual*.²³ However, in the context of international human rights law, *group rights* violations, such as the rights of indigenous peoples, are also considered to have particular implications for human dignity. Further, the right to dignity in the German Constitution may be described as an *objective* right, since one may violate one's own right to dignity. In the well-known *Peep Show Decision*, the German Federal Administrative Tribunal held that "this violation of dignity is not excluded or justified by

the fact that the woman performing in a peep show acts *voluntarily*. Human dignity is an *objective*, indisposable value, the respect of which the individual cannot waive validly."²⁴

As such, these different notions of dignity must be tied together in some form, which is attempted here in a working model of human dignity. The model has four levels, addressing (i) the foundations of human dignity, (ii) concepts of human dignity, (iii) major perspectives on dignity, and (iv) resultant dignity violations and responsibilities. This model is developed from three principle strands of thought found in the existing literature and are described and discussed below.

Three Strands of Human Dignity Strand 1: Agency and Autonomy

The first strand emphasizes the importance of individualistic dignity stemming from an individual's autonomous capacity to make moral judgments. Writers, such as Kant, Gewirth, and Beyleveld, have used the notion of *agency* to address the question of rights and dignity.²⁵⁻²⁷ In Gewirthian thinking—the capacity of a creature to select and act for purposes (*agency*)—becomes the virtue by which "generic" rights are granted.²⁸ Generic rights are rights to "things" that are required for the possibility of acting at all, or of acting successfully.

Beyleveld, who holds that *vulnerable agency* is the basis of dignity, considers the place of dignity in Gewirth's scheme. Thus, a being with the capacity for autonomous moral choice *and* the ability to perceive the possibility of being harmed, possesses dignity and hence (waivable) generic rights claims.

The essence of a violation of dignity, in Gewirthian thought, therefore arises from (a) denying that X is an agent (which occurs whenever X's generic rights are violated), (b) denying that X is a generic rights bearer, or (c) denying that X has rights equal to those of all other agents.

A rather strange result of this model, however, is that human beings who are incapable of autonomous moral choice (such as very young children or those in a persistent vegetative state) do not apparently possess vulnerable agency and thus do not possess dignity.²⁹ This idea of dignity is clearly very different from that found in Article 1 of the

UDHR: "all human beings are born free and equal in dignity and rights." ³⁰

For the purposes of our dignity model, we can nonetheless take a number of important elements from Gewirthian thinking. First, and most notably, an intrinsic part of human dignity is the capacity for autonomous action. To restrict an individual's autonomy (such that the individual subjectively *experiences* a restriction) is a violation of that individual's dignity. Second, denying that an individual is an "agent," or a generic rights bearer, is a violation of dignity. This is loosely equated with the Kantian notion of "not treating an individual *simply* as a means, but always at the same time as an end and correlates with the notion of the "instrumentalization" of human beings.³¹ Last, this strand also gives us the idea that all agents hold generic rights equally. Therefore, discrimination and denial of equality of rights may also be a violation of dignity.

Strand 2: Value and Restraint

In Strand 1, human dignity depends on the capacity for moral, autonomous thought. Strand 2, however, considers dignity as *inherent* to *all* human beings. This is the view of dignity preferred by the European Convention on Human Rights and Biomedicine, the European Court of Human Rights (ECtHR), and many national European courts.³² Thus, under the "European" view of dignity (which constitutes Strand 2), individual persons have a value to be protected because the species enjoys uniqueness and specialness that is itself deserving of protection.³³ Further, whereas Strand 1 is primarily concerned with *experiential* losses of dignity, Strand 2 also recognizes that dignity has an *objective* element where, on the grounds of dignity, it might be legitimate to limit human behavior that undermines the value we accord the species.³⁴

Thus, an analysis of the jurisprudence of the ECtHR reveals cases that speak of dignity in both a *subjective* way (akin to Strand 1) and an *objective* way.

Subjectively, the court clearly recognizes those dignity violations described by Beyleveld, such as denial of autonomy and the gross, chronic deprivation of rights.^{35,36} It also, however, identifies a number of other acts as particular vio-

lations of inherent dignity. These are (i) denial of the inviolability of human life, (ii) attacks on identity, and (iii) subjection to suffering and humiliation.^{37,38} In doing so, the ECtHR associates dignity violations with particular rights violations; so-called dignity-sensitive rights referred to earlier in the context of international human rights law.

On the other hand, the ECtHR case of *Brown*, the Conseil d'État case of *Lancer des Nains*, and the German *Peep Show Decision* show that, in the European way of thinking, dignity is *not* inextricably linked to a liberalist-individualist view of human beings as people whose life choices deserve respect. In *Brown*, the court stated that, in relation to consenting masochists, "the protection of private life means the protection of a person's intimacy and dignity, not the protection of his baseness or the promotion of criminal immoralism." In *Lancer des Nains*, the French Conseil d'État decided that it was an affront to human dignity to allow the throwing (for sport) of a person selected by reason for his physical handicap, despite the willing participation of the dwarf involved.

This approach suggests that the state may introduce regulations to restrict people's freedom to make choices that, in the state's view, interfere with the dignity of an individual, a social group, or the human race as a whole. Note that this appeal to the objective element of dignity is not necessarily an appeal to the dignity of the individual concerned, or even to the dignity of those directly affected by the action. Rather, an individual's actions may be capable of infringing a collective dignity, or even be incompatible with a (more metaphysical) notion of dignity, even if no tangible loss to the group or society can be directly identified.

However, as David Feldman notes in his discussion of dignity as a legal value, accepting that one should respect obligations flowing from objective dignity sometimes does little to tell us what those obligations should be.⁴¹ Indeed, those actions—peep shows, dwarf throwing, human reproductive cloning, masochistic acts, trade in body organs—that the European community has seen fit to place within this category are extremely varied. Exactly what is the essence of these violations?

First, objective dignity certainly has an element of contemporary morality. Objective dignity is (rightly or wrongly), to some extent, a reflection of a particular society's views of "civilized" behavior. Second, the idea of objectification or instrumentalization is also readily apparent. Strand 1 recognizes objectification as a violation of dignity but always considers autonomy as the trump card. This is not the case in the European (or Strand 2) concept of objective dignity. One essence of objective dignity may therefore be simply the principle that consent cannot always trump objectification. Finally, there is the idea that an individual may compromise the dignity of fellow group members (such as the dwarf in *Lancer des Nains*) insofar as the objectification is a direct result of membership of that group.

For the purposes of the dignity model then, Strand 2 contributes the important idea that, under at least some restricted circumstances, it may be legitimate to put human dignity, approached at the levels of the group and the human species, above the freedom of autonomous choice attributed to the individual. As such, the controlling parameter may be a consideration of the potential an action has to undermine the value we attribute to the human species.

Strand 3: Collectivity and Culture

The discussion now moves from classical Western rights-based thought to a concept of dignity described by Rhoda E. Howard in her treatise "Dignity, Community and Human Rights." Howard's key proposition is that while notions of justice, dignity, and human rights may, in principle, be universally *applicable*, they are *not* universal *in origin*. Howard notes that although human rights are predominantly private, individual, and autonomous, most cultures in the world tend to privilege the community or collectivity over the individual.

Under this particular concept of dignity, human dignity is not a claim that an individual asserts against society; it is not, for example, the claim that one is worthy of respect merely because one is a human being. Rather, dignity becomes public, collective, and prescribed by social norms. In other words, anthropologically, an important element of

human dignity is accepting the social rules and norms associated with social constraint. Such a concept leads to the claim that a group of persons may possess a form of dignity closely identified with its collective way of life. This concept of dignity arises particularly in the context of the dignity and rights of indigenous peoples. The UN Subcommission Chairperson of the Working Group on Indigenous Populations has noted, for example, that "the dignity and honour" of a community is intimately connected with "the common heritage of the people."⁴³

Strand 3, however, is at odds with Strand 1: Gewirth and Beyleveld hold that individualistic autonomy must always be upheld for the sake of dignity, whereas Howard contends that it is, in fact, the very compliance with social or moral norms that is part of the sense of dignity held by the individual and the community.^{44,45}

Howard's thinking demonstrates that human dignity, while intimately connected to the idea of rights, is not a rights-based concept per se. Indeed, Howard would maintain that rights are a particular expression of dignity. This serves to move dignity away from a violation scheme to a responsibilities- or duties-based scheme necessary for maintaining collective dignity. As such, nonfulfillment of responsibilities would be incompatible with both the communal dignity and the individual's dignity as part of that community.

Such an idea is not, after all, that alien to international human rights law. Article 1 of the UDHR states: "[Human beings] are endowed with reason and conscience and *should act* toward one another in a spirit of brotherhood." Article 29(1) also states that "everyone has *duties* to the community in which *alone* the *free* and *full* development of his *personality* is possible."⁴⁶

Interestingly, the Commission on Human Rights (CHR), in resolution 2000/63 on Human Rights and Human Responsibilities, "recalling that human responsibilities . . . were an integral part of the UDHR, but have since been ignored," stated that "human rights are closely linked to human responsibilities and both aim at human dignity."⁴⁷ That statement may suggest a move away from the (empowerment) paradigm—"I have dignity and therefore

rights"—toward the situation where individual and collective human dignity is strived for both by the observance of duties and exercise of rights.

A Working Model

We now need to consider how these three strands may be correlated to produce a "working model" of the notion of dignity (See Figure 1). The model should provide a common conceptual framework for analyzing questions of human dignity, which may (i) aid the development of core dignity standards to be applied to questions of bioethics, and (ii) guide the drafting of international law in this area, such as the proposed UN Convention on the Prohibition of the Reproductive Cloning of Human Beings.⁴⁸ Such a framework would notably be of use with respect to Article 11 of the UDHGHR, which cites not only HRC as a practice contrary to human dignity, but also calls on states to "co-operate in identifying" other practices that are "contrary to human dignity."⁴⁹

The following model aims to achieve this by presenting the facets of human dignity on 4 major levels:

- Level 1: three identified underlying foundations of dignity.
- Level 2: three "concepts" (the three strands) of dignity, each with a set of basic parameters.
- Level 3: the identification of the existence of two broad perspectives of dignity—subjective dignity and objective dignity.
- Level 4: potential dignity violations and responsibilities that result from the level 2 parameters and level 3 perspectives.

As such, the model flows from reasons (level 1) for possessing dignity, through clarification of the form (levels 2 and 3) of that dignity, to the ultimate consequence (level 4) of holding such dignity. Note that the model itself holds intrinsic tensions and competing ideas. For example, the level 2 concepts may not always be neatly described in terms of the (level 3) subjective-objective dichotomy, since the concepts may contain elements of both perspectives. The concept of Obligations and Society, for instance, while primarily concerned with an objective understanding of the

collective dignity of a particular society, may also have a subjective element, insofar as marked attacks on communal identity may clearly be felt and experienced by the individual or the group as a whole. On the other hand, the concept of Agency and Autonomy feeds more clearly into a subjective perspective, because it is concerned almost exclusively with a resultant experiential effect. Very generally, however, the left side of the model tends to consider a "results-based test" most important—"Where is the tangible *subjective* loss of dignity?" But the right side considers that the "reasons or concepts" associated with an action may be more important—"Is this action compatible, in principle, with the standards of human dignity?"

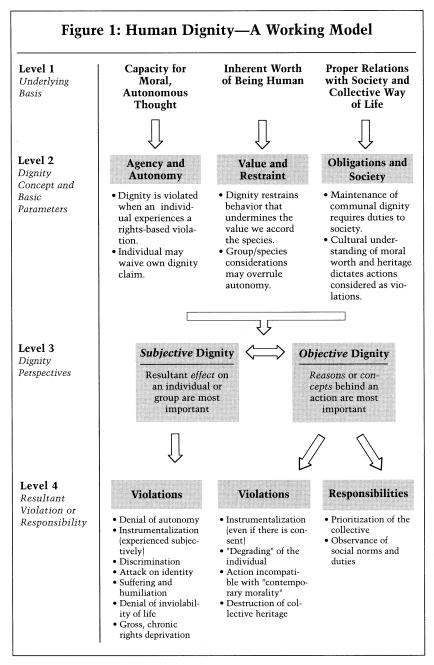
Levels 2 and 3 should thus be viewed together as a framework for outlining the "form" of dignity held. The subjective-objective dichotomy is not a rigid classification but rather an attempt to draw broad perspectives from the level 2 concepts. Indeed, the purpose of the model is not to resolve those tensions found in the literature but to provide a common framework within which international standards might develop. The model, it should be emphasized, is intended to provide an internationally consistent approach to assessing questions of human dignity, not an internationally identical set of resulting assessments.

How then might the model be applied in an attempt to address a particular dignity-based problem such as HRC?

The model offers two forms of assistance: First, the established lists of currently recognized violations and responsibilities (level 4) may be tested directly against the action or process in question. If the action or process has the potential to cause such violations or to undermine such responsibilities, it may be incompatible with a notion of human dignity.

Second, the problem may be analyzed in light of the level 2 and level 3 concepts and perspectives of dignity. These levels attempt to offer guiding principles for a core understanding of human dignity. As such, the level 2 parameters aim to provide a starting point for defining the boundaries of human dignity. Significantly, however, these parameters show that concepts of dignity, while having a core basis (such as a link

with universally agreed rights and the inherent worth of a human being), may be open to local or cultural interpretation. Notions of "moral worth" and "heritage," for example, may



differ considerably from one society to another, resulting in potentially diverse concepts of dignity. It is in this respect though, that the level 4 violation and responsibility lists help to provide at least some way to reach a common agreement on where such dignity boundaries might lie.

To reach a judgment about whether a particular process or action violates dignity, it is therefore necessary to consider both dignity parameters (such as consideration of duties to society and rights-based demands) and the extent to which existing, established violations and responsibilities delineate them. Further, in reaching a particular dignity-based result, one concept or perspective of dignity may be emphasized over another.

In terms of this model, the challenge for the drafters of the proposed UN Convention on the Prohibition of Reproductive Cloning of Human Beings, and of other future international bioethics instruments, is to decide what the core dignity parameters mean for biotechnological practices—that is, do such practices cross dignity parameters to the extent that a common international agreement for a ban must be established, regardless of cultural or societal interpretive aspects of those dignity parameters?

The case of HRC is now examined in light of the model.

Applying the Dignity Model to Human Reproductive Cloning

The first question to be asked is this: Exactly what *elements* of HRC should be included in a test against the model of dignity? In analyzing any process or situation from a human rights perspective, it is useful to break down the process as follows: (i) the *reasons* or *motivation* behind the process, (ii) the *process* itself, *and* (iii) the *results* of the process. Analyzing the results of a process, as well as the process itself, is certainly required; however, it may be less obvious why one might wish to consider the reasons or motivations behind the actions. Indeed, some would argue that it is inappropriate for a rights (and responsibilities)–based approach to consider the thinking behind an individual's actions. But, on the contrary, international human rights law may occasionally address the possible incentive behind an

action. Article 1 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, for instance, considers the *motivations* behind infliction of "severe pain and suffering" in defining those actions that amount to torture. 50 Article 3 of the Convention on the Elimination of All Forms of Racial Discrimination calls on States parties to condemn apartheid, where apartheid is defined as "inhuman acts committed *for the purpose* of establishing and maintaining domination by one racial group of persons." Notably, the state of mind may be considered when human rights standards overlap criminal law.

Importantly, with respect to the regulation of biotechnology, *national* domestic provisions (which may themselves be supported by criminal sanctions) that control HRC and other biotechnological practices, such as embryo manipulation, also often take into account the *reasons* behind such practices. Under the English Human Fertilisation and Embryology Act (HFEA), for example, embryo research licenses may only be issued *for the purposes* of, among others, the treatment of infertility or the development of preimplantation screening techniques.⁵²

Thus, while it may ultimately prove difficult for an international legal instrument on HRC to address the issue of state of mind, it is legitimate, from the point of view of both human rights and comparative law, to consider the possible reasons for carrying out HRC in this discussion. Indeed, the model of human dignity presented previously also demands reflection on the reasons and concepts behind an action.

In the context of our model of human dignity, we can therefore expect that a consideration of the *reasons* behind HRC will lie on the *right side* of the model, falling predominantly within the domain of the (level 3) *objective* perspective of dignity. Level 2 parameters that may be applicable include the notions of maintaining communal dignity and whether HRC may undermine the value we accord the species.

Conversely, a consideration of the results of HRC will be addressed mainly in the context of the *left side* of the model, which is (level 3) *subjective*, experiential dignity. In this respect, the level 2 parameter of whether any individual experiences a ("dignity sensitive") rights-based violation is of great importance.

As far as the process itself is concerned (that is, the SCNT technology described earlier), applying the range of dignity parameters would likely reveal implications for both the objective and subjective perspectives of dignity. For example, issues of free, informed consent may challenge the autonomy of the egg donor, leading to possible violations of subjective dignity. Further, those who attribute full human status to the fertilized egg may argue that the process undermines the value we accord *the species*, which would then constitute an attack on the objective dignity perspective.

For the purposes of this article, we therefore propose to leave aside the dignity implications of the nuclear transfer process and technology. A dignity analysis of nuclear transfer would in itself demand a discussion more akin to a study on therapeutic cloning and the direct dignity implications of human-embryo manipulation and experimentation. As such, the arguments merit separate presentation elsewhere.

The following three-part discussion therefore tests (the reasons for and results of) HRC using the dignity model. Each part is based on one of the three (level 2) dignity concepts, as described by its basic parameters and associated broad (level 3) perspectives. As previously mentioned, "results of HRC" will tend to fall within the left side of the model, whereas "reasons for HRC" will tend to be addressed in terms of the right side.

Test 1: HRC and Agency and Autonomy

As the model shows, this particular concept of dignity may be violated if the individual (or a group of individuals) *subjectively* experiences (and does not consent to) a "dignity sensitive," rights-based violation. As a result, should any individual created by cloning (or indeed involved in the cloning process in another way) experience any such effect, a basic parameter of dignity would be crossed and dignity likely violated.

With respect to HRC, probably the most relevant established violation (level 4 of the model) of this parameter is

denial of autonomy. Indeed, it is commonly argued that, were an individual created by HRC, he or she would *experience* a recognizable loss of autonomy resulting from the preselected nature of his or her genome. Such a scenario would then create a legitimate concern that the *results* of HRC could lead to an individual's dignity being violated in this way. The issue is, *how* exactly, if at all, would HRC reduce the capacity for freedom of choice?

The question is often analyzed using the notion of genetic determinism: the extent to which a person is "controlled" by his or her genetic makeup.⁵³ Pure genetic determinism suggests that we are entirely a product of our genes.

Although the debate on genetic determinism has long focused on "genome" versus "envirome" (the environment in which a new human being is brought up), a more accurate view is probably the recently presented "lifeline perspective." 54-56 This view holds that, insofar as any aspect of life can be said to be "in the genes," our genes provide the capacity for both *specificity* (a lifeline relatively impervious to developmental and environmental buffering) and *plasticity* (the ability to respond appropriately to unpredictable environmental experiences) of life.

In fact, whether or not complex behavioral patterns are believed to be controlled largely by genetic factors, the result, with respect to a subjective autonomy-based violation of HRC, is almost identical—with one exception: Suppose, for example, that all behavioral characteristics (and the capacities for moral, autonomous thought and choice) were generated purely environmentally. If this were the case, then the genome of a particular person would be inconsequential to his or her capacity for autonomous action. "Preselection" of a genome (cloning) could therefore never have the effect of restricting that autonomy and hence of violating dignity.

On the other hand, if genetic determinism were completely true (that is, all behavioral characteristics are controlled genetically), then it would not only be true for the clone (who had had his or her genome, and therefore behavioral characteristics, preselected) but also for all other noncloned people. The clone would still have the same capacities (however minimal they are in our "genetically deter-

ministic world") to make his or her own choices, as everyone else does. The difference would be, however, that in the clone's case, there may now be people who know or suspect what those choices will be (since they have "controlled" this particular preselection). In principle, there is now a greater chance that autonomy can be diminished by third-party interference in the clone's life. In this respect, however, any subjective reduction of autonomy is the result of independent events, which are merely made possible by the nature of the clone's genome, and is akin to a person born with physical disabilities experiencing discrimination, for instance, as a result of the actions of those persons with whom he or she interacts.

Both scenarios do not, of course, accurately represent the (probable) situation with respect to genetic determinism. Our capacities for autonomous choice, and the choices themselves, are a complex interplay between our genetic makeup and the environment. In reality, the risk of persons' knowing or suspecting the choices that a clone might make is extremely minimal. The actual ability of third parties to interfer with a clone's autonomy should therefore be no greater than any person's ability to affect the autonomy of another through everyday relationships, obligations, and interactions. In terms of the dignity model (and assuming the specificity-plasticity paradigm of genetic influence, the unlikelihood that HRC would cause a subjective reduction in the clone's autonomy suggests that the results of HRC would not necessarily lead to an autonomy-based humandignity violation.

Another potential violation of the "agency and autonomy" concept of dignity may arise if an individual is subjected to or experiences suffering and humiliation or discrimination (level 4 of the model). With respect to HRC, whether a cloned human being would indeed experience suffering and humiliation as a direct result of that person's "selected genome" is extremely hard to predict.

The only existing evidence that may be applicable comes from studies of children born using existing assisted reproduction (AR) techniques (such as in vitro fertilization [IVF] and donor insemination). These studies have shown

that, as to quality of parenting and family functioning, mothers of AR children report less parenting stress and more positive relationships than mothers of naturally conceived children. In most cases, no statistically significant differences in a child's emotions, behavior, self-esteem, or perception of family relationship have been reported.⁵⁷ Such data, however, are only extrapolative to HRC to the extent that cloning could be used as a specific treatment for infertility (since AR data refer to instances when in vitro techniques have allowed otherwise childless couples to bear children).

As shall be examined below, its use as a treatment for infertility would only be one such possible motivation for employing HRC. Furthermore, there may be many psychological problems associated with cloning that are simply not created by existing AR techniques. Commentators note that an individual's psychological sense of uniqueness and individuality might be undermined by merely knowing that he or she was a clone, aside from the effects of treatment by third parties. Such a proposition is necessarily speculative. Yet, if an individual's creation by HRC leads to psychological effects that cause suffering and humiliation, then the "rights-based violation" parameter suggests that a violation of the "agency and autonomy" concept of human dignity may result.

Test 2: HRC and Value and Restraint

With respect to Value and Restraint, the relevant (level 2) parameters state that "dignity may restrain behavior that undermines the value we accord the species." To this end, group and species considerations may overrule the requirements of autonomy attributed to the individual. Such tests fall largely within the objective (level 3) perspective of dignity, such that a consideration of the reasons or concepts behind HRC may ultimately dictate whether human value is undermined by such violations as "instrumentalization," "degrading the individual," or "incompatibility with contemporary morality" (level 4).

Developing an objective consideration of human cloning is, however, far from simple. Indeed, the question to

be addressed by the international community may well be, just *how* objective should any convention be? For example, one might examine the very *essence* or *concept* of HRC to decide whether it undermines the value we accord the species. Alternatively, and somewhat less objectively, examining the *motivations* behind HRC may provide a way to analyze cloning based on this particular dignity concept.

In a highly objective analysis, HRC in itself may be considered contrary to human dignity, irrespective of its results or motivations. The whole *essence* of HRC is to *preselect* the genome of a future person. It therefore might be argued that the *very fact* that we wish to deliberately *transfer* the entire DNA from an existing (human) source to an enucleated egg to create a new being *must* betray at least some degree of belief in genetic determinism (the idea that an individual's "nature" is largely under genetic control). Thus, HRC, *by its very nature*, arguably becomes concerned with enabling one person to "reduce" another to a genetic basis, and hence determine, or *think* that they can determine, how a new being will "be" or behave.

Viewed in this way, the "concept" of nuclear transfer cloning would, according to the model, likely be an affront to this particular "concept" of dignity. If the relevant (level 2) parameter is "an undermining of the value accorded to the species," then from an *objective* dignity perspective, the very basis of HRC could tend to do as much, by its reliance on and perpetration of false genetic values.

Such an argument, however, could also be used against the legality of many items or processes. For example; one could object to guns on the grounds that the *concept* of a gun is incompatible with the right to life or right not to be subjected to cruel, inhuman, or degrading treatment. While the argument may exist in theory, clearly it is unlikely to be followed in practice. Nevertheless, this approach is not unlike that adopted by the Conseil d'État, *Lancer des Nains* decision and the German Federal Administrative Tribunal in the *Peep Show Decision*, where the very *essence* of the action was considered as important in relation to an objective perspective of dignity.

Aside from a consideration of the *essence* of HRC, examining the potential motivations for cloning is worth-

while to test their compatibility with the Value and Restraint concept of dignity. The model suggests this approach because motivation may be an important element in the objective-dignity perspective.

There are four conceivable primary reasons why one might want to use HRC:

- to "replace" a dead child or fetus
- to "select" perceived favorable human characteristics
- to treat infertility
- to create a new person who could also be a suitable organ donor

Can any of these reasons potentially undermine the value we accord the species, in a way described by the objective level 4 violations, or otherwise?

The first two reasons certainly appear to betray at least some intent to control how a new human should "be." The person controlling the cloning specifically chooses the new person's genome to be identical to another (existing or dead) person's genome, as they believe (rightly or wrongly) that this will cause the new person to be (physically or behaviorally) a particular way. The danger here is that the desire to control may cause an "instrumentalization" (level 4) violation. If a child is *created* for the purposes of "being the same" as another instead of being himself or herself, then this is similar to treating a cloned individual simply as a means and not at the same time as an end. Of course, the desire to have a child who would be the "same" as another would not be met in practice. Cloning a child who died at an extremely young age, for example, does not replace that child; it creates a new, independent human being. Nevertheless, it is hard to imagine that the "value" of a clone created for the first or second reason would not become (in the mind of the person controlling the cloning) dangerously vested in the notion of being the "same" as the DNA donor. Together, such potential vesting of value and instrumentalization may constitute a dignity violation, according to the parameters of this particular dignity concept. As Beyleveld submits: "If a person wishes to clone himself or herself in order to predetermine what they will become, value, do, etc., then that intention can be said to be contrary to the autonomy of agents and a violation of human dignity."59

However, an approach that considers motivation in any detail is in itself weak because of the difficulty an international instrument would have delineating between benign and problematic motives. Does a violation of dignity (on the grounds of objective instrumentalization) occur only if, for instance, someone wants to "re-create" a dead person or to create a future star athlete? But no violation occurs if the intention is merely to have a girl with particular brown eyes and black hair? Would HRC *only* be incompatible with dignity if people carrying out cloning *did want to* generate clones whose personalities or futures they could somehow predict?

The model therefore presents the question of whether it would be practical for the drafters of an international instrument on HRC to refer to reasons for cloning to justify a ban. The analysis does show that HRC has greater potential to undermine value and violate human dignity when used for certain reasons than when used without such motivations. Any international instrument would, however, have much difficulty distinguishing between motives within such a spectrum.

One possible answer may be for the drafters of an international instrument to acknowledge a "background" level of argument for a ban, which considers that it may not only be the subjective *results* of HRC that have the potential to violate dignity. As such, motivations would then be addressed directly only if relevant to any exceptions that allowed HRC for particular purposes.

Regarding exceptions to a ban, reasons (3) and (4) are considered good examples of instances when HRC may be beneficial. The potential "essence of HRC" dignity problems previously discussed demonstrates that the arguments for using HRC for such purposes would need to be very strong. It is therefore helpful to consider briefly whether the third and fourth reasons would have implications under this concept of dignity and, conversely, the extent to which benefit may be provided.

Regarding motivation (3), HRC would allow couples to have a child genetically related (in fact, genetically identi-

cal) to one parent, where this would otherwise be impossible. Should both potential parents be infertile, for example, HRC would allow the child to have the *same* genetic material as either the mother or the father. This, it is argued, could be preferable to adoption or to anonymous sperm and egg donation.

From the point of view of dignity, the desire to treat infertility clearly does not violate any of the parameters associated with an objective perspective of dignity. The motivations would appear similar to using IVF or other such AR techniques. Thus, the question is whether the argument is strong enough to sanction the use of HRC for this purpose, given all other dignity considerations associated with the use of reproductive cloning (including those described below in Test 3).

Indeed, the potential availability of HRC as an infertility treatment raises deeper issues about the tension between dignity-imposed restraint and empowering rights, such as the right to the highest attainable standard of reproductive health and the right to family life. Such rights may also demand protection by human dignity, as part of the principle of respect for autonomy. The model recognizes this inherent tension by acknowledging that even though autonomy is generally upheld for the sake of (subjective) dignity, an objective perspective on dignity may demand that considerations of the group or species take precedence over an individual's claim to autonomous action.

In balancing such considerations, a relevant question may be whether HRC offers the *only* effective route to reproduction in otherwise impossible cases. Pragmatically, HRC seems a strange technique to use if the goal is to have a child bearing some genetic resemblance to one or both parents. In fact, HRC is simply the *first* successful technique (in mammals) in the field of nuclear transfer and nuclear reprogramming technology. It is not the *only* technique possible but rather is one end of a scale of possibilities. For example, somatic (body) cells from *each* parent may possibly be induced to undergo meiotic reduction division, generating cells from *each* parent and containing 23 chromosomes. The nucleus from each haploid cell would then be transferred to an enucleated egg and the resultant construct,

being genetically related to *each* parent, may have full developmental potential.⁶¹

Thus, while HRC may currently appear to offer the only treatment route in certain cases, this may soon be far from true. Meiotic reduction transfer technology remains untested, but if successful, then in principle it should not compromise dignity parameters as suggested by the model for HRC.

Finally, the fourth potential reason for carrying out HRC—the desire to have a child who could act as a transplant donor—merits brief consideration. HRC may allow parents to have a second child (genetically identical to an ill first child) who could then act as a blood or bone-marrow donor to the first child, with a greatly reduced risk of transplant rejection or incompatibility.

Although prima facie it appears that there should be a dignity violation on the grounds of autonomy and instrumentalization (as the child is born for a particular purpose), this may not, in fact, be the case. Commentators contend that "there are always [personal, selfish] reasons why one has children," and suggest that these should be no different from, for example, wanting an heir or someone to take over the business.⁶² Indeed, cases have already been reported of parents specifically undergoing IVF treatment, knowing that they had a one-in-four chance of creating a child who would be a suitable donor for an existing child. In terms of the dignity model, acceptance of this argument must also include acceptance that the somewhat more "moralistic" transplantation motivation serves less to undermine the value of the species than a more "selfish, narcissistic" reason for carrying out HRC, such as selecting favorable characteristics. Whether an international ban on HRC would include an exception for this particular use of HRC brings the discussion back to the difficult question of the relationship between respect for facets of autonomous choice and the Value and Restraint dignity requirement of the primacy of objective human value.

By way of summary, application of the model can identify potential affronts to the Value and Restraint concept of human dignity that the *essence* of and *some* of the *reasons*

for HRC present. Such an analysis would, however, be problematic for an international instrument to deal directly with the question of motivation. Nonetheless, in *developing* a common rights-and-dignity-based stance on HRC sufficient attention must be paid to the question of motivation, because differing reasons behind the wish to clone may profoundly influence the conflict between dignity-based autonomy and restraint.

Test 3: HRC and Obligations and Society

Finally, what does the model say about HRC and the dignity concept of Obligations and Society? This third concept deals with communal dignity or "the dignity of humankind." It falls primarily within the objective dignity (level 3) perspective, and its (level 2) parameters suggest that HRC should be considered in relation to compatibility with notions of societal duties and cultural understanding of moral worth. As noted earlier, such notions may differ from one society to another, and hence the challenge is to identify a core area on which common agreement may be reached.

The Council of Europe, in its explanatory report to the Protocol on the Prohibition of Cloning Human Beings, suggests that, "Objectively, the autonomy facet of *group* or *societal* dignity is best protected by ensuring that, individually, everyone is brought into being with an essentially random genome." In terms of the concept of dignity at hand, this may be rephrased as, "Does dignity demand that we prioritize the human race, insofar as the human race itself is constituted by individuals, each genetically distinct?" That is, does dignity impose a *responsibility* to protect a key feature of humanity (our "genetic heritage"), from which (to an undetermined extent) we *acquire* key capacities such as autonomy and the capacity for moral thought?

The dignity model certainly suggests that destroying heritage can violate human dignity (see level 4) if an aspect of a society's (objective) sense of identity and moral worth is concomitantly attacked (as per the level 2 parameters of this particular dignity concept). Thus, for HRC to cause an affront to human dignity in that way (a) the genome must somehow be important as heritage, (b) HRC must be capable of compro-

mising or destroying such heritage, and (c) this must be linked to a common notion of shared identity and worth.

Whether the genome is viewed as heritage involves a determination of the extent to which our collective gene pool is public property, which we hold in trust for the future, and the extent to which the very personalized packages into which it is subdivided precludes treating it as a public resource. 64 Its treatment to date shows that it has elements of both a private law and public law property right. For example, an individual may have control over the use of their own personal genetic information (Article 5 UDHGHR), yet it is commonly accepted that "human genome sequences should be a public trust and therefore not subject to copyright."65 While the argument may not be resolved, there clearly is a sense in which our genetic material is, at the very least, a determinant factor in the life of the generation to come. On a group level, one vivid example is the statistically significant rise in birth defects following the Chernobyl nuclear disaster. In a very real sense, the next generation inherits any genetic consequences of the actions of the previous one. However, a notion of genetic heritage may be more than the mere physical genome. In a real sense our genetic heritage (at least as it stands today) is also a usual expectancy that each of us is born with (essentially) a random, unmanipulated genome, generated by the fusion of male and female gamete cells.

How though might HRC "destroy" or compromise such a genetic heritage? And why might it have implications for a communal sense of moral worth and identity (and hence dignity)? Certainly the human genome is not inviolable to the extent that *any* intervention on an individual or larger-scale level would be considered as compromising genetic heritage. As a species, we (unproblematically) influence our genome by selective mating, disease-control programs, and increased global accessibility and travel.

At the far end of the scale, so-called eugenics programs, which specifically aim to alter the gene pool (by either preimplantation screening or post-implantation measures) may clearly be considered an attempt to permanently destroy an element of the genome.⁶⁶ Such programs clearly violate digni-

ty by (subjective) denying autonomy, and inflicting suffering, humiliation, and discrimination on those subjected to them. But over and above such violations, eugenics is fundamentally contrary to dignity because, from an objective perspective and regardless of the results of such a program, it is based on the concept that some humans possess a higher *worth* than others as a result of their genetic inheritance. In terms of the dignity model, by attempting to destroy elements of genetic heritage, eugenics affects established societal structures and the sense of worth derived from the basic sharing in the human genome and violates communal dignity.

HRC lies somewhere between natural genome intervention and deliberately targeted programs. The key features of HRC are to remove the need for sexual reproduction and create persons genetically identical to others. Admittedly, HRC would need to be used on a massive scale to physically and actually affect the pool of alleles (variants of genes) available to be inherited. While it has the (objective) potential to do so, HRC is unlikely, in practice to destroy the allelic variety of the human genome as an inheritance in itself.

What about the potential of HRC to change the current "genetic lottery"? Is it the randomness of genetic inheritance that deserves special protection as the important feature in our understanding of worth and dignity? It is hard to imagine the effect were HRC and other germ-line genetic manipulation techniques to become commonplace. Lawsuits, however, could arise between generations over supposed rights to inherit or not inherit particular genes, or embryo-genetic manipulation may eventually become a precondition for the "privilege" of conception. Further, widespread use of reproductive cloning may be problematic in those cultures and societies that emphasize the importance of a highly structured or extended family. HRC serves to confuse definitions of parenthood: Does a person created by cloning have a single parent in the somatic nucleus donor or are the *donor's parents* considered as having another child? Although society has adjusted to evolution in the so-called typical family structure, the concept of destroying heritage as a dignity violation has most often been invoked with respect to more traditional, indigenous societies. Such person groups may be particularly vulnerable to possible societal implications of HRC because traditional family structure is far more important to their way of life and communal identity (and hence their dignity) than in Western societies, where both nontraditional reproductive choices and family structures are far more commonplace.

Another issue that may undermine a sense of communal dignity is the danger that clones would be stigmatized within society. Already commentators have referred to an SCNT-created embryo (with possible full developmental potential), not as an embryo, but as a "somatome," in order to emphasize that "the cells of a somatome are nothing more than cells that contain a genome prepared from a tissue sample."⁶⁷ Such use of language is an early hint that a person created by cloning could easily be viewed as a different class of human being.

The Obligations and Society concept of dignity must clearly not be used to prohibit any process that may lead to social change. Nevertheless, the "sexual," random reproductive process is key to many cultural understandings of the place of persons in society and hence to a sense of communal dignity. As such, this represents a lowest common denominator for dignity parameters. The ultimate effect of HRC may indeed be different in each particular society to the extent that local values may not recognize HRC as violating the communal sense of dignity to an equivalent degree. However, the creation of persons specifically to be genetically identical to another necessarily may begin to compromise the random *mechanism* by which we are all members of the human species, yet at the same time, are all unique and individual. As such, the Obligations and Society dignity strand may demand that any international instrument consider whether the lowest common denominator identified does indeed create a responsibility to restrain the use of HRC.

Conclusion

This article has considered the difficult issue of human dignity and its application to laws governing human reproductive cloning. It has developed a working model of digni-

ty, which will hopefully be useful as a tool for the international community to analyze biotechnological practices in terms of a contemporary understanding of human dignity. The model presents parameters of dignity that possess a core basis, and yet leave scope for possible local or cultural interpretation. In terms of the model, the challenge for the drafters of a UN Convention against the reproductive cloning of human beings is twofold: (i) to reach agreement on the boundaries of the core requirements or responsibilities of human dignity and (ii) to consider whether HRC indeed crosses such boundaries. In an attempt to debate some of the issues raised by such an exercise, this article has tested the reasons for, and results of, HRC against each of the dignity concepts contained in the model.

The results show the following:

- (i) With respect to a subjective perspective of dignity, the impact of HRC may only be problematic to the extent that a clone experiences suffering and humiliation.
- (ii) A highly objective perspective of dignity may suggest that the essence of HRC has the capability to undermine the value we accord the species, and hence to violate dignity.
- (iii) Some motives for using HRC may be incompatible with the principle of noninstrumentalization suggested by an objective perspective of dignity. It would, however, be extremely difficult for an international instrument to differentiate between benign and dignity-violating motives.
- (iv) A tension exists between the dignity demand for autonomy and dignity restraint arguments where HRC is desired to be carried out for nonproblematic motives.
- (v) HRC can erode "genetic heritage" and compromise a society's established sense of communal dignity and worth. Local values, however, may not recognize HRC as violating the communal sense of dignity to an equivalent degree.

In terms of assistance for the drafters of the UN Convention, the model and its application presented here

offer a logical framework for addressing dignity issues systematically. The tests used show that a defensible argument could be constructed for referring to core values of human dignity in justifying a general ban on HRC. An explanation for any such reference to dignity in the Convention might be provided by noting in the preamble, the existence of different dignity perspectives, concepts, and parameters. Should the drafters wish to refer to dignity in specific instances, such as for exceptions, the model provides an approach to balancing dignity arguments that weigh on the sides of both autonomy and restraint.

In essence, the model offers the drafters of the UN Convention a starting point for developing a holistic, commonly agreed on core view of human dignity (with varying emphasis on each of the three [level 2] concepts as they may choose) that can act as the benchmark in the development of international bioethical standards.

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- **67.** B. B. Rudolf, "Cloning Humans? Current Science, Current Views, and a Perspective from Christianity," *Differentiation* 69 (2002): 184–187.