Holding onto Humanity: Animals, Dignity, and Anxiety in Canada's Assisted Human Reproduction Act

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Introduction

The Assisted Human Reproduction Act is an anxious statute.¹ As far as statutes go, this is not too unusual. Many statutes are enacted to address an actual or looming problem of social disorder.² Law is often invoked at these moments to cabin real and imagined effects, and the AHRA is no exception. As a single piece of legislation, it establishes Canada's position on a range of controversies surrounding the human body and the manipulation of its different stages and parts in the name of science. Such controversies include human cloning, embryo research, trade in reproductive parts, germline genetic alteration,³ pre-conception sex selection,⁴ and pre-implantation sex diagnosis.⁵ For the most part, the AHRA is a prohibitive statute, enacted to restrict researchers from practicing certain technologies and procedures

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¹ Assisted Human Reproduction Act, S.C. 2004, c. 2 (hereinafter "AHRA").

² See e.g. Canadian legislations enacted to alleviate HIV/AIDS drug shortage in Africa (*The Jean Chretien Pledge to Africa, An Act to Amend the Patent Act*, S.C. 2004, c.23), to protect the health and safety of individuals and the environment from nuclear substance (*Nuclear Safety and Control Act*, S.C. 1997, c. 9); to regulate the possession of ordinary firearms and to protect individuals from gun violence (*Firearms Act*, S.C. 1995, c. 39, which was held to be constitutional by the Supreme Court of Canada in *Reference Re Firearms Act*, 2000 SCC 31).

³ Germline genetic alteration is "alter[ing] the genome of a cell of a human being or *in vitro* embryo such that the alteration is capable of being transmitted to descendants." *AHRA*, s. 5(1)(f).

⁴ Pre-conception sex selection is a procedure that would "ensure or increase the probability that an embryo will be of a particular sex." *AHRA*, s. 5(1)(e). The most commonly used technique in pre-conception sex selection is sperm sorting through flow cytometry which mechanically separate the X-bearing sperm from the Y-bearing sperm. See Deckha, Maneesha. "(Not) Reproducing the Cultural, Racial and Embodied Other: A Feminist Response to Canada's Partial Ban on Sex Selection" (2007) 16 UCLA Women's L.J. 1 at 5.

⁵ Pre-implantation sex diagnosis is a procedure in which multiple embryos are created in vitro and the sex of the embryo is identified by genetic testing before it is implanted into the uterus of the intended mother-to-be. See Deckha, *ibid.* at 6. The *AHRA* prohibits pre-implantation sex diagnosis "except to prevent, diagnose or treat a sex-linked disorder or disease." *AHRA*, s. 5(1)(e).

and for-profit transactors from creating a market out of these technologies and procedures.⁶

To a considerable extent, two types of anxiety propel the prohibitions: commodification and species anxiety.⁷ Commodification anxiety, a term coined by Joan Williams, refers to the unease that many individuals experience at the thought of market forces establishing a trade in human body parts and tissues and thus reducing them (and us) to mere commodities.⁸ Species anxiety reflects a similar phobia that individuals manifest at the thought of the human body intermingling with another species at the reproductive, genetic, cellular, or other body part level,⁹ in spite of the fact that interspecies biological interface happens routinely.¹⁰ Though typically discussed in isolation of one another, these anxieties are intimately related and belie what I argue is a critical but unacknowledged binary at the heart of the AHRA: the need to define what is "human" by distinguishing humans from nonhuman animals. This paper explores the centrality of this need animated by species prejudice in the AHRA and thus connects Canada's current bioethical landscape to the larger dialectic and cultural project that constructs human subjectivity out of animality and positions the latter as inferior to humanity. This dichotomy, on which our cultural species identity is constituted and legal personhood rests, generates a corresponding fear of losing our special cultural and legal status through dehumanizing practices

The first part of this paper explores the practices and discourses by which Western culture has sought to define and stabilize the "human" signifier precisely through

⁶ The *AHRA* bans human cloning, the creation of human embryos for a purpose not related to reproduction, maintaining a human embryo in vitro after the 14th day of development, pre-implantation sex diagnosis, pre-conception sex selection (except to avoid a sex-linked disease), germline genetic alteration (s. 5), payment for surrogacy and acting as intermediary to arrange paid surrogacy (s. 6), purchase of sperm, ova, or other genetic materials (s. 7), the use of donor sperm, ova or in vitro embryo without written consent (s. 8), and the procurement of sperm or ova from a donor under 18 years of age (s. 9).

⁷ For discussion of species anxiety and biomedicine, see Waldby, Catherine & Squier, Susan. "Ontogeny, Ontology, and Phylogeny: Embryonic Life and Stem Cell Technologies" (2003) 11 Configurations 27, at 33; Baylis, Francoise & Robert, Jason Scott. "Crossing Species Boundaries" (2003) 3(3) *Am. J. Bioethics* 1.

⁸ Williams, Joan. Unbending Gender: Why Family and Work Conflict and What To Do About It (New York: Oxford University Press, 2000) at 118.

⁹ Bloomfield, Brian & Vurdubakis, Theo. "Disrupted Boundaries: New Reproductive Technologies and the Language of Anxiety and Expectation" (1995) 25(3) *Social Studies of Science* 533.

¹⁰ For example, the human body contains numerous species of microorganisms, both inside the digestive system and on its skin. The human body is also the reservoir of many strains of viruses, such as the human papillomavirus (HPV), or herpes simplex virus. Each human cell also contains a component called the "mitochondrion," which originated from an ancient species of bacteria. The mitochondrion maintains its own genome (although some of its genes have been incorporated into the human genome) and lives in a symbiotic relationship with the host human cell. See Henze, K. & Martin, W. "Evolutionary Biology: Essence of Mitochondria" (2003) 426 *Nature* 127 at 127-28.

drawing boundaries demarcating human bodies from nonhuman animal ones.¹¹ Historical and contemporary examples, as well as the role of gender and racializing discourses in shaping species identity, are covered and elucidated. Part II describes commodification and species anxiety in more detail, both of which are an important part of the attempt to define what it means to be "human." The undercurrent of human dignity influential to both anxieties is explained, and its impact on legal discourse is charted. Part III then reveals how the AHRA reflects both of these anxieties and the concern for human dignity upon which they hinge and thus responds (problematically) to the need to entrench species boundaries. The type of trade in human body parts and human-animal species mixing that the statute bans is outlined and their rationales discussed. Connecting the first three Parts, Part IV examines the AHRA as a participant in the cultural project of defining the human and the implications of this contribution for animal advocates, a group for whom new reproductive technologies are not a primary concern. This Part considers three arguments defending the AHRA's current provisions under an egalitarian framework and shows the vulnerability of each of these objections. Contrary to what the name indicates and even eclipses, ideas about the nonhuman and animality and reproduction of human identity claims are core concerns for the AHRA.

What follows, then, is not a critique of the AHRA for failing to qualify as an animal law reform initiative that posthumanists might desire. That the AHRA treats animals as commodities as all other statutes do is not the central point of this paper. What I wish to highlight here is the AHRA's importance in instantiating species boundaries in law when unprecedented technoscientific developments direct our collective consciousness to the fragility of these demarcations. The AHRA, of course, is not alone as an instantiation of such cultural phenomena. But as a specific legal initiative, it is distinctive from other statutes as a discursive site because it deliberately works to sustain a clear and hierarchical species binary. In this boundary-drawing regard, the AHRA is different from other statutes that instrumentalize animals but do not engage in identifying and classifying the ethical permissibility of practices to *explicitly* protect human dignity and dominant views of who/what is a human/animal. In order to properly situate the AHRA's investment in species boundary drawing and its contemporary impact, it is necessary to first set out the long-standing historical project of defining the human.

¹¹ This is not to say that non-Western cultures do not constitute humanity from animality. The extent to which they do is far beyond the scope of this paper. I use the term "Western" not to conflate the differences among Western societies as to their treatment of animals, but to recognize the legacy of Enlightenment thinking on currently accepted "truths" and knowledges about what it means to be human which circulate in Europe and historically white settlor spaces. These are knowledges which enjoy a cultural prestige because of the hegemonic global epistemic capital that Western thought carries. See de Sousa Santos, Boaventura. *Another Knowledge is Possible* (London; New York: Verso Press, 2007); Kapur, Ratna. *Erotic Justice: Law and the New Politics of Postcolonialism* (London: Glass House Press, 2005).

Part I: Humans Defined Through Animals

The interdependence between human and animal identity may be discerned through multiple routes. This Part highlights several examples, both historical and contemporary, to illustrate how understandings of human nature or what it means to be human emerge from our cultural constructions of animals, which are themselves deeply informed by ideas connected to gender and race.

a) A Historical Narrative

The project of defining the human has been an enduring and contested one.¹² As Diana Fuss notes, "[j]ust who counts as human, and why, underwrites a long saga of contentious debate within humanist discourse" with all its hierarchical origins and logics.¹³ In the Enlightenment's influential Cartesian framework, the alignment of knowledge and the "human" is "almost always accompanied by a barely discernable corollary which suggests that some human beings are more human than others – either on account of their access to superior learning, or on account of their cognitive faculties."¹⁴ Many Enlightenment actors, animated by ideas of difference relating to gender, race, class, sexuality, age and ability, have deployed ideas of the "human" to deny the humanity of marginalized human groups. Paradoxically, in the name of humanism and universal values of equality and autonomy, genetically "human" individuals made abject by stigmatized social identities related to the above differences have been cast outside the boundaries of the human¹⁵ and animalized to different extents.¹⁶

The implication of such animalization was, to be sure, pejorative under the prevailing Cartesian mindset that regarded nonhuman animals as mere machines responding mechanistically to stimuli and existing to serve autonomous humans.¹⁷ What Leela Gandhi has termed "the epistemological narcissism of Western culture"¹⁸

¹² Cavalieri, Paola. *The Animal Question: Why Nonhuman Animals Deserve Human Rights* (New York: Oxford University Press, 2001) at 10-12.

¹³ Fuss, Diana. "Introduction" in Diana Fuss, ed., *Human, All Too Human* (New York: Routledge, 1996) 1 at 2.

¹⁴ Gandhi, Leela. *Postcolonial Theory: A Critical Introduction* (New York: Columbia University Press, 1998) at 29. There were, of course, scholars who did not adopt a Cartesian mechanistic or sharply dichotomous view of humans and animals at that time. Yet, the primary legacy of western humanist philosophy is to define humans through animals and in the process render them abject. See Kelly Oliver, Animal Lessons: How They Teach Us to Be Human (New York: Columbia University Press, 2009) at 4.

¹⁵ Fuss, *supra* note 13 at 2.

¹⁶ Squier, Susan Merrill. *Liminal Lives: Imagining the Human at the Frontiers of Biomedicine* (Durham, NC: Duke University Press, 2004) at 96.

¹⁷ Corbey, Raymond. *The Metaphysics of Apes: Negotiating the Animal-Human Boundary* (New York: Cambridge University Press, 2005) at 22.

¹⁸ Gandhi, *supra* note 14 at 37.

supports a narrative of reason and progress that positions different ways of knowing as underdeveloped and fosters the emancipatory myth of the colonial "civilizing mission."¹⁹ The epistemic subject postulated by this model lays claim to a position of mastery in a world of unknowing Others and is linked to the humanist impulse to order and possess nature.²⁰

Of course, humanism has also applied this discourse of Othering directly to beings who are not genetically "human," labouring to identify and entrench qualities and characteristics that distinguish and elevate humans from nonhumans whenever such boundaries were imperiled, as with the advent of Darwin's theory of evolution.²¹ Historically, these purportedly distinctive human traits have included the possession of a soul, the capacity for reason, autonomy, language, tool use, tool-making, altruism, ethics, faith, self-consciousness, and complex emotions and relationships.²² Humanists have repeatedly proffered one or more of these traits as constitutive of "human nature" and its elevated status. The belief in Enlightenment philosophy and ethical traditions that humans were opposite and superior to animals and thus not biological animals themselves is a particular construction of that time period. A sense of acute difference between humans and other animals, even nonhuman primates, emerged during the Enlightenment and prevailed thereafter despite the rise and spread of Darwin's theory of humans' kinship with other primates and our continuity with nonhuman animals in general.²³

This search for human uniqueness and essential, unyielding nature, which could then serve to justify the exclusion of animals from ethical considerations, is as much a story about race, Empire, and animality as it is of humanity.²⁴ The human was defined by what it is not – animal.²⁵ This was accomplished through the standard Cartesian-derived binaries – Nature/Culture, Civilized/Savage, Self/Other, etc. – that permeated multiple oppression discourses and created racial, cultural, and other hierarchies.²⁶ Indeed, the force fields of race and species created a complex nexus of

²³ Corbey, *supra* note 17 at 65-70. To be sure, challenges to the uniqueness of humans existed prior to Darwin's theoretical ascent, but Darwin's theories had a formative influence on anxiety surrounding human specialness that merits heightened attention: Ravelengien, An, Johan Braeckman & Mike Legge. "On the Moral Status of Humanized Chimeras and the Concept of Human Dignity" (2006) 6 *Between the Species* at 11.

²⁴ Lancaster, Roger N. *The Trouble with Nature: Sex in Science and Popular Culture* (Berkeley, University of California Press, 2003) at 59.

²⁵ Corbey, *supra* note 17 at 34.

²⁶ Squier, *supra* note 16 at 104. See, generally, Deckha, Maneesha. "The Salience of Species Difference for Feminist Theory" (2006) 17(1) *Hastings Journal of Women and the Law* 1.

¹⁹ *Ibid.* at 32.

²⁰ *Ibid.* at 36-37.

²¹ Wolfe, Cary. Animal Rites: American Culture, the Discourse of Species, and Posthumanist Theory (Chicago: University of Chicago Press, 2003) at 6.

²² Bekoff, Marc. Animal Passions and Beastly Virtues: Reflections on Redecorating Nature (Philadelphia: Temple University Press, 2006) at 12-13; Bennett, D. Scott. "Chimera and the Continuum of Humanity: Erasing the Line of Constitutional Personhood" (2006) 55 Emory L.J. 347 at 373; Wolfe, *ibid*.

cultural meanings as to who was fully human and who/what was not. As Susan Squier attests, anxiety over species classification was never merely about separating humans from animals but was also motivated by desires for racial purity and fears of contamination – an imperial anxiety about threatening racial and cultural differences.²⁷

In turn, ideas of differences among humans that were generated with the rise of hierarchical Empire projects influenced species demarcations and the view of different animals.²⁸ The nexus between race and species helped to produce narratives that worked to preserve European dignity when confronted with Darwin's theories of humans' "beastly" origins. In *The Metaphysics of Apes: Negotiating the Animal-Human Boundary*, Raymond Corbey explains how the paradox of reluctantly accepting biological connections to animality based on Darwin's findings while insisting upon a vast moral discontinuity between humans and animals was managed:

The theory of evolution merged with the eighteenth-century idea of an ascent to civilization and reason. Humans' apish ancestors were thus held at arm's length, as were non-Western peoples living in small-scale societies. The latter came to be viewed as still half-beastly relics from the past, so-called "contemporary" ancestors," "primitive" in the negative and not just in the neutral sense of being the first. In this context, it was not so much the different eternal essence of humans that constituted the cleft between them and their apish ancestors, but the long, heroic ascent to civilization and the rationality achieved exclusively by Western citizens as the paragon of humanness.²⁹

Corbey stresses the cultural and temporal provenance of the worldview that still inhabits popular Western cultures of humans atop a hierarchy of beings and highlights the intersecting trajectories between the force fields of race, culture, and species.³⁰ It is no coincidence that humans' relationship to animals was assumed to be dichotomous and dominating at a time when Cartesian binaries were busy providing rationales for Western (human) Empire-building and subjugation of non-Western humans. Animals and non-Westerners were seen as without culture – non-autonomous actors ruled by instinct and bodily needs rather than rational thought.³¹ The Cartesian binaries of Culture/Nature, Mind/Body, Reason/Emotion, and Civilized/Savage worked to deposit animals and racialized non-Westerners on the subordinate side of these dichotomies – governed by nature, lacking civilization and reason, the requisite feature entitling one to human membership and full moral

²⁷ *Ibid.* at 96. Franklin, Adrian. Animal Nation: The True Story of Animals and Australia (Sydney: University of South Wales Press, 2006) at 48-49.

²⁸ Franklin, *ibid.* at 50.

²⁹ Corbey, *supra* note 17 at 22-23.

³⁰ I borrow the term "force field" from Joan Williams' description of gender in her book *Unbending Gender, supra* note 8 at 37-39.

³¹ Perhaps the one bodily need that was highlighted the most was sex. Both apes and non-Westerners were seen to be sexually lascivious and insatiable. See Corbey, *supra* note 17 at 75-80.

status.³² Additionally, both selective cultural and physiognomic "features" of different groups were educed as evidence of non-Westerners' animality and Westerners' corresponding position atop a hierarchy of civilization.³³

Even though evolutionary insights were gaining mainstream acceptance during this period and supplanting Westerners' claimed divine origins with primate ones, *social* Darwinism enabled a discourse that blurred the species boundaries between animals and racialized, non-Western humans.³⁴ The latter appeared as "contemporary ancestors" at a different stage of evolution.³⁵ Racialized non-Westerners were regarded as more than a step removed from the purported "fullest" attainment of humanness located in Western societies through culture and physicality. The insertion of racialized peoples as an index of bestiality/animality and lack of civilization enabled a discourse about the "ascent to Civilization" and thus a deeply desired distancing of Europeans from that which many could not confront and found humiliating – their bestial origins and "essence."³⁶

The selective deployment of scientific accounts and the quest for an essential human "nature" were not just confined to a narrative of species difference and superiority informed by race but engaged the social force fields and discourses of gender and sexuality as well. As Roger Lancaster details in his discussion of representations of queerness, the selective scientific description and emphasis of certain animal behaviours aligned with a desire to naturalize a particular heteronormative, gender-dichotomous, and monogamous sexual order.³⁷ Scientific

³² Corbey, *supra* note 17 at 36-37.

³³ Discussion of physical features correlating to a higher civilization status centered on "the degree of prognathism - forward projection of the jaws and teeth." See Corbey, ibid. at 37. Europeans relegated non-Westerners to substandard positions along the civilization spectrum for their cultural projections as to how non-Westerners behaved. Standard material in this colonial repertoire of representation included the characterization of non-Western societies as "traditional," 'superstitious," "duty-bound" as well as "sexually excessive" and "animalistic." The treatment of women and animals in non-Western societies was also commonly highlighted as another reason illustrating the cultural backwardness of non-Westerners who were not seen as culturally enlightened as Europeans in practicing kindness, virtue, and humanity. These were perverse deployments of both groups given the questionable and false perception that Europeans treated either women or animals better. Many non-Western cultures are more egalitarian in their worldviews with respect to relationships between genders and species. See, e.g., Corbey's discussion of non-Western cultures and religions in Corbey, ibid. at 31-33. For how women and the "status of women" in a particular society became a rallying point in defense of the colonizing mission, see Nayaran, Uma. Dislocating Cultures: Identities, Traditions and Third-World Feminism (New York: Routledge, 1997). For a similar discussion with respect to animals, see Jennifer Wolch & Jody Emel, eds., Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands (New York: Verso, 1998) at 42. For further general discussion of the production of cultural differences by Western societies to distinguish themselves from non-Western cultures, see Kapur, supra note 11.

³⁴ Corbey, *supra* note 17 at 33-34.

³⁵ Franklin, *supra* note 27 at 48.

³⁶ Corbey, *supra* note 17 at 61-62.

³⁷ Lancaster, *supra* note 24 at 59-60.

and cultural representations were able to accomplish this framing of reality despite the fact that over 95% of species are not monogamous.³⁸ Selective distillation and extraction of facts from a whole repertoire of possible observations, comparisons, and interpretations helped construct a race-species-gender hierarchy.

What is critical to note is that despite Darwin's thesis about continuity among species, science, in the discipline of evolution no less, participated in culturally reinscribing a bright natural dividing line between humans and non-humans and preserving the fabled concept of exclusive human dignity.³⁹ While the contemporaneous internal disagreement among scientists as to the arbitrariness of species taxonomies and the boundedness of species categories attests to the fact that some scientists were willing to impugn humanist theories of human superiority, many others were motivated by species anxiety.⁴⁰ Though the latter believed in evolution sufficiently deeply to admit that knowledge about humans could arise through observing animals and did engage in this mode of research, the results were rarely neutral since "observation is an embodied, social, and collective act."⁴¹ The observation was never at the expense of or with the intention of yielding a sense of a species hierarchy and the special status of humans at its apex.⁴²

b) Contemporary Understandings

Presently, Western science and culture have acknowledged many of the problematic and reductive views of the Enlightenment noted above. While there is still an abundance of scientific values, premises, practices, and norms amenable to feminist, postcolonial, anti-racist, queer, and posthumanist cultural critique,⁴³ scientists now at least acknowledge the fluidity and constructedness of species.⁴⁴ Also, "[i]t is no longer plausible to highlight a particular cluster of cognitive (or any other previously proffered marker of unique human ability) as both necessary and sufficient for inclusion in humanity" since any "magic" feature will exclude some humans and include other non-humans.⁴⁵ Strict sociobiological accounts contrasting essential

³⁸ Hird, Myra. "Animal Transsex" (2006) 21:49 Australian Feminist Studies 35 at 39.

³⁹ Byrd, Mette, Lykke, Nina & Birke, Lynda. "Animal Performances: An Exploration of Intersections Between Feminist Science Studies and Studies of Human/Animal Relationships" (2004) 5 *Feminist Theory* 167 at 173.

⁴⁰ Ritvo, Harriet. "Barring the Cross: Miscegenation and Purity in Eighteenth- and Nineteenth-Century Britain" in Fuss, *supra* note 13, 37 at 44-45.

⁴¹ Corbey, *supra* note 17 at 37.

⁴² *Ibid*.

⁴³ See, for example, Sandra Harding. *Science and Social Inequality: Feminist and Postcolonial Issues* (Urbana: Chicago University Press, 2006) impugning, among other things, the presumption that science is universal and biological and other scientific facts are acultural and objective.

⁴⁴ Baylis & Robert, *supra* note 7 at 7; Bennett, *supra* note 22 at 376.

⁴⁵ Baylis, Francoise & Fenton, Andrew. "Chimera Research and Stem Cell Therapies for Human Neurodegenerative Disorders" (2007) 16 *Cambridge Quarterly of Healthcare Ethics* 195, at

animal natures as wholly distinct from an essential human nature have become less popular as has a proud and pervasive sense of a civilization hierarchy with middleclass European culture as the model human ideal. Although systemic racism and cultural imperialism persist, the discourse of human rights for all humans regardless of race, gender, and the like is widespread.⁴⁶ Moreover, a cultural shift is evident in the greater acceptance of the emotional dimensions of the lives of nonhuman animals. As Corbey notes, starting with Jane Goodall reaching out to touch the finger of a chimpanzee, images from the 1960s onward circulated through media portraying the family and relational lives of animals and have entered and stayed in mainstream consciousness.⁴⁷

Yet, despite the better understanding of the complexity of animals' lives and the discrediting of race (if not yet gender and sexuality) as a biological category, the sociobiological idea that an imagined and acultural Nature explains animal behaviours while humans are categorically special remains a hegemonic norm.⁴⁸ This idea inheres in our culture despite the rise in "nature talk" or naturalism through genetic explanations for human behaviour.⁴⁹ Similarly, the social construction of species difference persists today and continues to be inflected by the currents of race, gender, sexuality, and other seemingly anthropocentric concepts.⁵⁰ This leads to a continued need by hegemonic actors to articulate with greater certainty and clarity that special something that legitimately establishes human identity as the coveted

203-204; Bennett, *supra* note 22 at 374. This, of course, does not mean that species enthusiasts will not still try. See, e.g., Cohen, Eric. "The Human Difference", Commentary, December 2006 (arguing that humans are the only ones with culture). Even leaving aside the argument from marginal cases, the argument does not entertain the possibility that animals have culture, too. See Corbey, *supra* note 17 at 15; Haraway, Donna. *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989) and *When Species Meet* (Minneapolis: University of Minnesota Press, 2008). For an argument that attempts to locate human uniqueness in a genetic understanding of ourselves, see Mekel-Bobrov, Nitzan & Lahn, Bruce T. "What Makes Us Human: Revisiting an Age-old Question in the Genomic Era" (2006) 1 *J. Biomed. Discovery & Collaboration* 18.

⁴⁶ These rights, of course, are not widely experienced and are inherently based on the figure of the white, western male, middle-class, heterosexual and able-bodied actor and thus exclusive. For an explanation of why liberal human rights discourse is always already exclusive, see Ratna Kapur. "Human Rights in the 21st Century: Take a Walk on the Dark Side" (2006) 28 *Sydney Law Review* 665.

⁴⁷ Corbey, *supra* note 17 at 10.

⁴⁸ Lancaster, *supra* note 24 at 61, 66. For a discussion of the cultural life of animals, see Bekoff, *supra* note 22 at 13; for a fictive account, see Gowdy, Barbara. *White Bone* (New York: Metropolitan Books, 1999).

⁴⁹ Lancaster, *supra* note 24 at 14.

⁵⁰ Baylis & Robert, *supra* note 7 at 2, 6. Lancaster illuminates how even current sociobiological descriptions of animals, which reduce them to their biological behaviours, are harnessed to promote a conservative and gendered agenda of family values. *Ibid.* at 61-68. Consider the evangelical Christian embrace of *March of the Penguins* as a "pro-family" movie. See G. Calder. "Penguins and Polyamory: Using Law and Film to Explore the Essence of Marriage in Canadian Family Law" (2009) 21:1 *Canadian Journal of Women and Law* 55.

repository for ethical worth and animal and other nonhuman identities as the excluded Others. The next Part details the precise contours of both commodification and species anxiety that have presently emerged to protect this tenuously drawn ethical landscape, especially with respect to the new biotechnologies that threaten it.

Part II: Commodification and Species Anxiety

The desire to retain a notion of human uniqueness and specialness results in elevated concern when a practice, activity, or other phenomenon appears to impugn this special cultural status. This heightened level of concern is present when the human body is susceptible to commodification and animalization. This Part sets out these two types of anxieties, taking care to stress the role that the concept of human dignity, however ill-defined it may be in cultural and legal discourse, plays in animating them.

a) What are these anxieties?

i. Commodification Anxiety

Commodification anxiety arises from the notion that not everything can or should be bought or sold in the marketplace. For example, there is widespread concern that love, babies, and sex should be excluded from the domain of the market. Margaret Jane Radin refers to things that can be given away but not exchanged for value as market inalienable.⁵¹ When these things become exchangeable in the marketplace, it causes great unease and anxiety because of the peril commodification is thought to impose on personhood values. One major objection to the commodification of human biological materials is that people who are the sources of these biological materials are often exploited.⁵² For example, the first commercialized human cell

⁵¹ Radin, Margaret Jane. *Contested Commodities* (Cambridge, MA: Harvard University Press, 1996).

⁵² Commodification anxiety does not necessarily preclude commodification. Historically, human biological material was of use only to its possessor and there was very little need for its commodification. The emergence of medical education, however, made dead human bodies a valuable commodity for the teaching of human anatomy, and an illicit trade in dead human bodies began to appear in Britain and the United States in the 19th century. With advances in modern biomedical research, especially advances in in vitro fertilization and recombinant DNA technologies, which were both developed in the late 1970s, the market for human biological material has greatly expanded. In the United States, there is a very large market for human blood, human ova and sperm, human cell lines, and biopsied human tissue. One can easily find a paying blood plasma collection center in many urban areas or near the campuses of many large state universities. At the more elite private universities, one often sees campus newspaper ads seeking egg donations from healthy attractive students with excellent SAT scores in exchange for payment of up to \$25,000. See Huang, Kat. "Egg Donor Ads Target Women of Ivy League", *Yale Daily News*, March 22, 2005. A typical ad in a Columbia University newspaper reads: "Become an egg donor and you will be compensated with \$8000.

line, the HeLa cell line, was named after Henrietta Lacks, a middle-class African-American woman from Baltimore and mother of two, who died of cervical cancer at the age of 31 in 1951.⁵³ A physician-scientist, George Otto Gey, at the Johns Hopkins Hospital where Henrietta Lacks was being treated cultivated her cervical cancer cells without her knowledge and consent. Her cells became the first human cells to live indefinitely outside the body. Numerous biomedical research projects, including the development of the first polio vaccine, have relied on the HeLa cell line. Today, the cell line is still widely used and can be purchased from the American Type Culture Collection (ATCC).⁵⁴ Since the creation of the HeLa cell line, many other cell lines have been created and commercialized.⁵⁵ Indeed, the development of biotechnology in the 1980s led to the patenting of many human genes and human cell lines. Notably, the collection of human genes and human cell lines from indigenous populations for the purpose of developing commercial therapeutic products has caused concern among indigenous groups, who have called the practice "biopiracy" or "biocolonialism."⁵⁶

While the remuneration of the human sources or donors of the cells may be one solution to the exploitative dynamic in the above examples, many theorists would remain troubled by commodification of human biological materials. What still generates concern is the violation of the symbolic status of the human as beyond the tainted realm of mere things. The greatest objection to the commodification of the

⁵³ Skloot, Rebecca. "Cells That Save Lives Are a Mother's Legacy," New York Times, November 17, 2001, at A15.

⁵⁴ See American Type Culture Collection, Cell Biology Collection, online: <http://www.atcc.org/common/catalog/cellBiology/cellBiologyIndex.cfm>.

⁵⁵ In the 1970s, researchers at the UCLA Medical Center created a novel cell line from patient John Moore's T-lymphocytes without his knowledge and consent, and the University of California subsequently obtained a lucrative patent on this cell line. After finding out about this, John Moore filed a lawsuit against the University, seeking damages for conversion. The Supreme Court of California ruled against Moore and found that he had no property rights in his discarded cells or any profit made from them. *Moore v. Regents of the University of California*, 51 Cal. 3d 120; 271 Cal. Rptr. 146; 793 P.2d 479 (1990).

Today, thousands of different human cell lines are commercially available. The most controversial among them are perhaps human embryonic stem cell lines, which were first developed in 1997 by scientists at the University of Wisconsin. Human embryonic stem cell lines are derived from human embryos and the current method of establishing embryonic stem cell lines involves the destruction of the human embryos. One should, however, recognize that even if non-commodification is achieved at the source of the human biological material, as in the Moore case, commercial transactions still takes place throughout the subsequent chain of distribution from researcher to product developer to the ultimate consumer. See generally Mahoney, Julia D. "The Market for Human Tissue" (2000) 86 *Va. L. Rev.* 163.

⁵⁶ Nelkin, Dorothy & Andrews, Lori. "Homo Economicus: Commercialization of Body Tissue in the Age of Biotechnology" (1998) Hastings Center Report, Sept/Oct. at 33.

All treatments will be performed by board-certified physicians at a reproductive medical center in NYC. Please be between the ages of 21-29, Caucasian or light olive complexion, very pretty with attractive physical traits." Columbia Spectator, http://www.columbiaspectator.com/media/paper865/template/ad2ad/.

human body is perhaps that it has been accorded a special social, cultural, and religious significance that separates it from all other beings, and its commodification is an affront to the elevated position of humanity.⁵⁷

This effect is of particular concern for feminists and other critical theorists because it makes vulnerable the already precarious personhood of those humans whose class, gender, race, sexuality, and/or disability expose them to the borderlands of the human category.⁵⁸ These theorists fear that those who will "agree" to commodify their body through the sale of reproductive materials or gestational capacities will come from the less privileged sectors of society, whose members have fewer choices in procuring a livelihood. Radin refers to this as the double bind - choosing between starving and selling one's body.⁵⁹ Critics fear that poor and racialized women who will disproportionately find themselves in this double bind, turn their bodies into commodities, apply a market discourse to themselves, and thus begin to see themselves as more of a thing than a person.⁶⁰ What is worse, though, is the probability that mainstream society will also regard them as even more objectified than they already are while the personhood identity of more privileged individuals remains intact and is even fortified.⁶¹ This objection that commodification will mar the special cultural meaning and legal personhood status assigned to human beings and exacerbate existing inequalities is inflected and informed by species anxiety.

ii. Species Anxiety

As discussed above, the signifier "human" is by no means a stable one with a core meaning across all periods and cultures, and much cultural energy is expended on monitoring the boundaries between what is human and what is not in order to protect a distinct and special status for human beings.⁶² Recall that, historically, this zone of protection actually excluded some groups, whom most of us today would easily characterize as human,⁶³ because of their abject race, gender, class, age, or sexuality status. Although such demarcations still stimulate human rights struggles, currently cultural and legal actors are concerned with threats to human identity occasioned by the blurring of species boundaries.⁶⁴ Again, when species lines are troubled, it causes

⁵⁷ Ibid; Hyde, Alan. Bodies of Law (Princeton, NJ: Princeton University Press, 1997) at 48-80.

⁵⁸ Radin, Margaret Jane & Sunder, Madhavi. "Introduction: The Subject and Object of Commodification" in Martha Ertman & Joan Williams, eds., *Rethinking Commodification: Cases and Readings in Law and Culture* (New York: New York University Press, 2005) 8 at 11; Nedelsky, Jennifer. "Property in Potential Life? A Relational Approach to Choosing Legal Categories" (1993) 6:2 *Can. J.L. & Juris.* 343 at 349.

⁵⁹ Radin, *supra* note 51 at 123.

⁶⁰ Squier, supra note 16.

⁶¹ Ibid.

⁶² Fuss, *supra* note 13, at 1-2; Elstein, Daniel. "Species as a Social Construction: Is Species Morally Relevant?" (2003) 1:1 *J. Critical Animal Studies* 1 at 13-15.

⁶³ Ibid.

⁶⁴ *Ibid*.

anxiety because the humans involved become "animalized," as Cary Wolfe terms it, and thus absorb the subordinate status assigned in Western cultures to nonhumans in general.⁶⁵

To witness the persistent prevalence of species anxiety in Western culture, one has only to consider the response to People for the Ethical Treatment of Animals' (PETA) short-lived campaign comparing animal exploitation to the American experience with slavery. In 2005, PETA launched a series of wall posters that compared animal industries' treatment of animals to human slavery.⁶⁶ One ad, for example, juxtaposed a shackled human leg with an elephant's shackled leg. Another comparison showed a lynched black male body alongside a chimpanzee in a neck and fully body restraint on a vivisecting table. Still another depicted a white police officer brutally assaulting a black young man next to the image of a Canadian sealer bludgeoning a baby seal to death.⁶⁷ The point of PETA's campaign is clear: animals are treated as slaves, and since slavery is wrong this treatment of animals must cease. The meaning of the campaign, which was launched in the United States, was received quite differently from prominent groups representing African Americans. The National Association for the Advancement of Colored People released a statement objecting to the "dehumanizing" effect of the comparison.⁶⁸

Rather than interpreting the campaign as an effort to dislodge the hierarchical dialectics that oppress both marginalized human groups and nonhumans, people experienced the comparison as a dehumanization and consequent animalization that contested the human status of African Americans.⁶⁹ As Cathryn Bailey noted, "PETA's exhibit violated a taboo" by portraying a human crossing and thus blurring the species boundary, thereby associating those racial others recently freed from the markers of subhumanity – being "uncivilized", "savage", and "without culture" – with animals still tethered to these representations.⁷⁰ Given the weight of the legacy of slavery and deep-seated racism in the United States on the collective cultural psyche,

⁶⁵ Wolfe, Cary. "Subject to Sacrifice: Ideology, Psychoanalysis, and the Discourse of Species in Jonathan Demme's The Silence of the Lambs", in Wolfe, *supra* note 21 at 101.

⁶⁶ PETA, *Animal Liberation Project*, "We Are All Animals", online at <http://www.peta2.com/alp/>.

⁶⁷ Ibid.

⁶⁸ Garriga, Maria. "Outrage on the Green", *New Haven Register*, August 9, 2005, online New Haven Registerhttp://www.nhregister.com/site/news.cfm?newsid=15000578&BRD=1281&PAG=461&dep.

⁶⁹ This is not to exclude the possibility of other reasons for the objection to the comparison. For example, some could have been objecting to the appropriation of a specific history for use by another group, however marginalized. I thank my colleague, Lincoln Shlensky, for raising this point with me. On the ethics of making parallels between sufferings, see Spelman, Elizabeth V. *Fruits of Sorrow: Framing Our Attention to Suffering* (Boston, MA: Beacon Press, 1997) at 9-10 and 113-132.

⁷⁰ Bailey, Catherine. "We Are What We Eat: Feminist Vegetarianism and the Reproduction of Racial Identity" (2007) 22:2 *Hypatia* 39 at 41.

the anxiety over losing the coveted "human" species status is easily understood.⁷¹ This is a point Bailey notes when she writes:

...[i]n the history of the United States, to be born as a white human being has been facilitated by contrast to animals with racialized others as the medium. The very genesis of race in the United States occurred, in part, because of arguments that certain groups of humans were closer to animals in some evolutionary sense.⁷²

Bailey's point demonstrates how species difference is productive of racial difference historically, but contemporary examples of animal practices serving as an index of imagined racial differences exist as well.⁷³ Indeed, the nexus between species and race (and other markers of difference) makes the presence of special anxiety in human rights contests comprehensible. Nevertheless, the species anxiety that haunts present-day human rights discourse, which is meant to be inclusive of all humans, reveals its own logic's exclusion of all those non-human. Moreover, it is because of the exclusiveness of rights and protections based on species status that potential loss of species identity is cause for anxiety.

b) Dignity as the Undercurrent

Commodification and species anxieties combine to establish and reinforce the human as a legal and moral person, meaning not a commodity and not an animal. Animals are, of course, thoroughly commodified in Western culture and thus bear the double marking of what the human is not. Central to both commodification and species anxiety is the value of dignity. This is a term that has eluded precise or consistent articulation in law.⁷⁴ As James Fyfe notes in his survey of Canadian constitutional jurisprudence, dignity is often, though not exclusively, associated with the values of "liberty, freedom and empowerment."⁷⁵ Sometimes it is even at odds with our common understandings of these concepts. Fyfe assesses the Supreme Court of Canada's discussions of dignity through two concepts distilled from bioethics literature.⁷⁶ In one respect, dignity refers to the idea of having one's choices respected; it becomes closely aligned with autonomy. This Fyfe terms "dignity-as-

⁷¹ Ibid.

⁷² *Ibid*. at 44.

⁷³ Wolch, Jennifer, Elder, Glen & Emel, Jody. "Le Pratique Sauvage: Race, Place, and the Human-Animal Divide", in Jennifer Wolch & Jody Emel, eds., *Animal Geographies, supra* note 33, 72 at 73.

⁷⁴ James Fyfe. "Dignity as Theory: Competing Conceptions of Human Dignity at the Supreme Court of Canada" (2007) 70:1 *Saskatchewan Law Review 1* at 1; Ravelengien et al. *supra* note 23 at 8.

⁷⁵ *Ibid*. at 2.

⁷⁶ Ibid. at 2-3, incorporating the work of Roger Bronsword in "Bioethics Today, Bioethics Tomorrow: Stem Cell Research and the "Dignitarian Alliance" (2003) 17 Notre Dame J.L. & Public Pol'y 15 and "An Interest in Human Dignity as the Basis for Genomics Torts" (2003) 42 Washburn L.J. 413.

liberty."⁷⁷ In another, dignity acts as a constraint against choices due to the violence that those choices may entail for larger social values related to human beings as a whole. People are thus prevented from exercising individual choice for its symbolic resonance and the anticipated moral decay of that it imposes on society as a whole. This Fyfe terms "dignity-as-constraint."⁷⁸

The tension at the intersection of these competing goals – advancing liberty while avoiding exploitation - captures the contours of the commodification debate described above. It is the latter dignity-as-constraint model that emblemizes species anxiety, since species anxiety is concerned with preventing certain violations of human boundaries even if individual humans would like to pursue such transgressions of their own or other's boundaries. This is so because "[a]t the centre of controversy is the anticipation that the blending of animal and human material will be so profound that the resulting chimeras will verge on what it means to be 'human'."79 Such a blending is therefore disturbing to normalized understandings of human identity and the privilege of dignity that should attach to it. The conventional articulation of human dignity rests on the traditional assumption that humans are special and superior beings.⁸⁰ This presumption is unproven yet widely accepted as a sacred truth.81 As Ngaire Naffine notes in her study of human dignity discourse within human rights movements, "legal doctrine and legal philosophy are replete with assertions about the instrinsic value of human life and the need to respect it" and this outlook is "implicit in the basic human rights instruments" that apply internationally.82

Sullying humans through commodification or the technological creation of a part human, part animal being would violate this sanctified position. It would confuse the social order, impugn our affinity for boundaries and the taboos against crossing them,⁸³ confront us with how poorly we treat nonhumans,⁸⁴ and prompt an examination of the integrity of the current parameters of personhood.⁸⁵ All of this troubling of species categories would destroy the special regard we have for humans and humans alone.⁸⁶ Some also view these hybridizing technologies as problematic due to concerns that these "near-human" entities will at once be perceived by some as

⁷⁷ Fyfe, *supra* note 74 at 3.

⁷⁸ *Ibid*. at 3.

⁷⁹ Ravelengien et al., *supra* note 23 at 2.

⁸⁰ Ngaire Naffine. Law's Meaning of Life: Philosophy, Religion, Darwin and the Legal Person (Portland, Hart Publishing, 2009).

⁸¹ Ibid. at 102.

⁸² Ibid. at 99, 101.

⁸³ Marie Fox, Marie. "Reconfiguring the Animal/Human Boundary: the Impact of Xeno Technologies" (2005) 26 *Liverpool L. Rev.* 149 at 152-153.

⁸⁴ Sylvie Bordet, Sabrina Feldman & Bartha Maria Knoppers. "Legal Aspects of Animal-Human Combinations in Canada" (2007) 1 *McGill Journal of Law and Health* 83 at 17.

⁸⁵ Fox, *supra* note 83 at 152-53.

⁸⁶ Baylis & Robert, *supra* note 7, at 7, drawing on Mary Douglas' classic study on cultural taboos and conceptual boundaries.

deserving more respect than, say nonhuman animals, yet not be treated well by others who still view these "near-humans" as existing below the critical threshold at which humanity and all of its ethical and legal protections attaches.⁸⁷

Our fears about species mixings are not limited only to the possibility of reproductive coupling between human and animal reproductive material. While the practice of grafting animal skins onto human bodies may not be a chimera-producing technology that raises alarm, the transplantation of multiple animal organs into humans does. As the majority of the Supreme Court of Canada itself recognized when asked to decide the question of patentability of higher life forms, xenotechnologies urge us to revisit the boundary lines around species identity that we have currently drawn.⁸⁸ The anxiety takes on a particular intensity when the mixing involves the insertion of human neural cells (inscribed with cognitive functions) into nonhumans, thus possibly bestowing the purportedly unique and special human capacity to reason upon nonhumans and raising their claim to moral status and dignity.⁸⁹

A number of scholars have interrogated this logic by asking why the possible creation of a new species (part human/part nonhuman) by responsible researchers in a regulated environment necessarily does violence to human dignity.⁹⁰ This feared result ensues only if one seeks to preserve the dignity concept, and the immense privilege that inhabits it, as exclusive to humans.⁹¹ But humans can still have dignity even if the concept extends beyond humans to the beings that occupy our "cultural borderlands" and, in fact, are "revealed as, or even becoming, creatures that have (human) capacities."⁹² It is not immediately clear that human dignity would be diluted as a result. In fact, eliminating the boundary eliminates the need to establish one's humanness through what one is not – animal. The fear of dehumanization then diminishes because to be "animal" need not translate into starkly different treatment, as it does now. By eliminating the boundary, we purge our thinking of the nonhuman figure that always haunts those marginalized human groups seeking to claim human dignity. Thus, destabilizing the boundary can actually strengthen the dignity claim.

What is more, it is not readily apparent *why* dignity is the preserve of human beings since the concept typically appears in legal and bioethical discourse without further explication.⁹³ The dignity claim in statutory, constitutional, and international documents is part of a dominant cultural narrative that is so normalized as to not require any justification. Contemporary understanding is still deeply influenced by

⁸⁷ DeGrazia, David. "Human-Animal Chimeras: Human Dignity, Moral Status, and Species Prejudice" (2007) 38:2-3 *Metaphilosophy* 309 at 310-311.

⁸⁸ Harvard College v. Canada (Commissioner of Patents), 2002 SCC 76 at para. 180-181.

⁸⁹ Ravelengien et al., *supra* note 23 at 7.

⁹⁰ Baylis & Robert, *supra* note 7 at 8; DeGrazia, *supra* note 87 at 313.

⁹¹ Baylis & Robert, *supra* note 7 at 8; DeGrazia, *supra* note 87 at 314.

⁹² Baylis & Fenton, *supra* note 45 at 202.

⁹³ Bordet et al., *supra* note at 84.

Kantian thought that defines the term anthropocentrically.⁹⁴ As Denise Réaume has commented, respect for human dignity "hovers over our laws like a guardian angel" to the extent that "human dignity in a very abstract sense provides the ultimate justification for every legal rule."⁹⁵ The self-evident character of human dignity thus easily translates into a series of unexplored claims about the quality of human life such that certain activities, such as patenting human life, should not occur.⁹⁶ The reliance of the claim to human dignity on this entrenched cultural narrative is not unsatisfactory only to those wishing to instill a posthumanist perspective in the law. Even critics not specifically concerned with the anthropocentric nature of this claim comment that the concept of dignity and its association with human beings has escaped even moderate justification in the political and legal arguments that make this claim.⁹⁷ Further elaboration on the human dignity claim would certainly help the AHRA, which declares in section 2 that one of the purposes of the statute is to promote human dignity but does not say anything further about the concept.⁹⁸

More important for posthumanist advocates, i.e., those seeking to include animals in their ethical thinking, the AHRA's attempt to manage the controversies under its purview is a potent opportunity not only to give dignity some substance, but also to question its confinement to the human sphere.⁹⁹ When pressed as to why the lives of animals do not merit the same consideration, humanists frequently resort to the

⁹⁸*AHRA*, s. 2; Bordet et al., *supra* note 84 at 96-97.

⁹⁴ Cataldi, Suzanne Laba. "Animals and the Concept of Dignity: Critical Reflections on a Circus Performance" (2002) 7.2 *Ethics & the Environment* 104 at 107.

⁹⁵ Réaume, Denise. "Indignities: Making a Place for Dignity in Modern Legal Thought" (2002) 28 Queen's L.J. 61 at 62.

⁹⁶ See the majority's discussion of whether the *Patent Act* permits the patenting of higher life forms in Harvard that "[w]hatever justification is used to support the assumption, there seems to be little debate that human life is not patentable." *Harvard, supra* note 88 at para. 177. For a discussion of how dignity, while not explicitly recognized as a right in American constitutional jurisprudence, still heavily laces it, see Rhonda Gay Hartman. "The Face of Dignity: Principled Oversight of Biomedical Innovation" (2007) 47 *Santa Clara Law Review* 55 at 57. Hartman herself opens her article with the statement that "[h]uman dignity is intangible, yet luminous." *Ibid.* at 55.

⁹⁷ Réaume, Denise. "Discrimination and Dignity" (2002-2003) 63 *Louisiana Law Review* 645, at 62.

⁹⁹ In using this term in this way, I borrow from a variety of scholars in the field focusing on animal subjectivities in their theoretical subversions of the human/nonhuman boundary and anthropocentric, speciesist norms. See, for example, Wolfe, *supra* note 21. As Cary Wolfe has noted, the term may also be used more broadly to advert to non-animal nonhumans as Karen Barad has defined it: "I use the terms "posthumanist" and "posthumanism" to mark a commitment to accounting for the boundary practices through which the "human" and its others are differentially constituted. Posthumanist performativity is not a celebration of difference for difference's sake; rather, it is about accountability to and for differences that matter." See Wolfe, *supra* note 21 at 6 and Karen Barad. *Living in a Posthumanist Material World: Lessons from Schrodinger's Cat*, in BITS OF LIFE: FEMINISM AT THE INTERSECTIONS OF MEDIA, BIOSCIENCE, AND TECHNOLOGY (Anneke Smelik & Nina Lykke eds., 2008) at 173. My use is restricted to animals.

common sense belief that humans possess a capacity that animals do not, and it is this dissimilarity that justifies their elevated moral status. As discussed earlier, various capacities have been highlighted historically to distinguish humans from animals. Corbey refers to them as "shifting goalposts" since the precise capacity or faculty shifted as scientific studies emerged to refute the uniqueness claim by showing nonhuman animals to exhibit the same trait(s).¹⁰⁰ The older capacities of reason, language, and tool use, for example, have given way to current arguments about capacities for abstract thought, religion, complex emotion, community, culture, aesthetics, and political views as being unique to humans and the justified bases for species preference.¹⁰¹ Even those few humanist scholars who admit of animals having dignity contend that human dignity is higher because of our claimed unique capacities.¹⁰² This is revealing of the ongoing mainstream desire to justify human specialness despite the difficulty in finding a capacity or faculty where humans and nonhumans do not overlap and, moreover, one that all humans exhibit.¹⁰³ It is also reflective of the disinclination to think the reverse – that animals possess a unique capacity or set of capacities that humans do not, which should ground an ethical claim for them.104

The technoscientific context of animal-human interspecies mixing has the potential to interrupt the dominant cultural narrative about human dignity, destabilizing the tenuous yet persistently claimed species boundaries in ways that command our attention. As Marie Fox states,

The unique mingling of human and non-human bodies on which xenotransplantation is premised poses a novel series of challenges to the animal/human boundary. Although this binary has seemed securely entrenched in law, in part because it has not attracted the same critique as other binary divides which structure liberal legalism, it is becoming increasingly unstable as genetic and other forms of knowledge increase. Along with other biotechnologies, such as cloning and sex surgeries, xenotransplantation raises the spectre of hybridity, and facilitates boundary changes that transgress concepts of species as well as of generation and gender. However, to an even greater extent than cloning, which has attracted considerably more ethicolegal and media attention, xeno technologies offer a compelling case study involving multiple challenges to traditional species and bodily boundaries.¹⁰⁵

Fox assigns an unprecedented stature to xenotechnologies to highlight the fragility of species demarcations through the threat of their disruption. She helps to illuminate

¹⁰⁰ Corbey, *supra* note 17.

¹⁰¹ Ravelengien et al., *supra* note 23 at 9, 11.

¹⁰² Eric Cohen. "Mortality, Equality and Bioethics" (2007) 7 *Yale Journal Health Policy Law and Ethics* 153 at 170 (claiming that a capacity for excellence, shame, and indignation distinguish us from animals are merit a higher dignity status).

¹⁰³ As Ravelengien et al. aptly note: "Over two thousand years of philosophical thought on human nature have not provided general agreement on a list of characteristics or capacities which distinguish human beings from other animals." Ravelengien et al., *supra* note 23 at 10.

¹⁰⁴ *Ibid.* at 9, 17.

¹⁰⁵ Fox, *supra* note 83 at 152-153.

the cultural and legal importance of statutes such as the AHRA that try to contain these technologies. While the AHRA, to reiterate, is not the only statute to perpetuate species difference through its regulation of practices that use animals and make species distinctions, it is distinctive for its intention to define and demarcate species boundaries around the human and the animal. Unlike other legislation that merely facilitates animal use (such as hunting legislation) or even tries to codify animal welfare (such as anti-cruelty statutes), the AHRA concerns itself with boundary questions of what is acceptable for human bodies (and thus animal ones) and is constitutive or violative of human identity.

Thus, my objective in the next Part is not to identify the AHRA as yet another statute that draws and perpetuates species distinction and species prejudice, even though the AHRA does do this. Rather, it is to elucidate how the AHRA re-inscribes species borders as new technologies threaten them and generate anxieties over the claim to human uniqueness. The AHRA permits a certain level of species mixing (arguably, where humans would stand to benefit), but I will argue that is entrenched in the typical modernist discourse of human dignity, specialness, and uniqueness.

Part III: Anxiety and Species Boundary-Drawing in the AHRA

Technoscienctific interventions into human and animal bodies have generated global concern.¹⁰⁶ The AHRA is not the first statute to deal with such matters or reflect the commodification and species anxieties precipitating these concerns.¹⁰⁷ It is instructive nonetheless to focus on the Canadian legislation to understand the contours of these anxieties in Canada and thus how it participates in the current global discourses surrounding human dignity and species boundaries.

a) Commodification Anxiety

The anxiety over the commodification of human body is acutely reflected in the activities prohibited and controlled by the AHRA. The prohibited activities include payment for gestational surrogacy, purchase of human gametes (ova or sperm), purchase of human embryos, and purchase of a human cell or gene for the purpose of creating a human being.¹⁰⁸ The penalties for violating a prohibition are up to ten

¹⁰⁶ Ravelengien et al., *supra* note 23 at 4. Sufficient global attention to technoscience has given rise to the Universal Declaration on the Human Genome and Human Rights wherein Article 1 indicates that "the human genome at the level of the species is what grounds the recognition of humanity and of an individual being's dignity." Bordet et al., *supra* note 84 at para. 61.

¹⁰⁷ For a discussion of developments see Fox, *supra* note 83 at 165.

¹⁰⁸ AHRA, ss. 6, 7.

years incarceration and/or \$500,000 in fines.¹⁰⁹ Granted, the Act regulates only commodification at the source, not in the subsequent chain of transactions. For example, it does not prohibit the sale of embryonic stem cell lines or any therapeutic products that are derived from human embryos, nor does it prevent for-profit fertility clinics from charging patients for in vitro fertilization procedures. The Act also does not prohibit Canadians from purchasing gametes or embryos or gestational surrogacy in the United States, although Health Canada is considering regulation to stop this practice.¹¹⁰

But whether or not the boundaries drawn by the AHRA are good or consistent is a separate question from what the Act's prohibitory motivations are. Despite the fact that consideration is eventually paid between third parties for human reproductive materials, commodification anxiety surrounding the selling of one's own body remains one of the major rationales for this legislation. An overview of the draft legislation released by Health Canada states:

Canadians also want to be sure that researchers don't push the frontier of science past acceptable ethical limits. And they want reassurance that Canada will not allow human life to be traded, bartered or in any other way commodified.¹¹¹

Others have emphasized the prominence of commodification anxiety in giving shape to the Act. For example, consider the position of Jeff Nisker, the former Chair of Canada's advisory Committee on Reproductive and Genetic Technology, a Health Canada entity that advised on the development of the legislation. In response to concerns that restrictions on embryo research in the Act are the enactment of pro-life sensibilities in thin disguise,¹¹² Nisker argued that the legislation was not a response to the moral status of the embryos but was meant to protect women and guard against commodification.¹¹³ Nisker's argument reinforces long-standing lobbying in this area

¹⁰⁹ This is if the Crown proceeded against the defendant through an indictment; if summarily, then the maximum penalties are four years imprisonment and/or 250,000 fines. *AHRA*, s. 60.

¹¹⁰ See Gazze, Mary. "Canada: Destination for Infertile Couples", *Globe and Mail* (26 June 2007); Mick, Haley. "Wanted: Good Men, Free Sperm", *Globe and Mail* (7 June 2007).

¹¹¹ Health Canada, quoted in Caulfield, Timothy & Bubela, Tania. "Why a criminal ban? Analysing the Arguments against Somatic Cell Nuclear Transfer in the Canadian Parliamentary Debate" (2007) 7(2) *Am. J. Bioethics* 51 at 54.

¹¹² Caulfield, Timothy & Campbell, Angela. "Parliament Must Be Clear On Reasons Behind Reproduction Law", *Edmonton Journal* (Jan. 13, 2003) at A14.

¹¹³ Jeff Nisker, quoted in Caulfield & Bubela, *supra* note 111. Protection of women is a relevant issue with respect to new reproductive technologies and stem cell research because the procurement of eggs from women and surrogate pregnancy pose special risks to women's health. See Giudice, Linda, Santa, Eileen & Pool, Robert. *Assessing the Medical Risks of Human Oocyte Donation for Stem Cell Research: Workshop Report*, (2007); Reilly, Dan R. "Surrogate Pregnancy: A Guide for Canadian Prenatal Health Care Providers" (2007) 176(4) CMAJ 483, at 484-85. Women's eggs are valuable to stem cell researchers because eggs are required for the generation of embryos (either through in vitro fertilization or somatic cell nuclear transfer) which are then used as the source of embryonic stem cells. See Deckha, Maneesha & Xie,

by feminists concerned about the effect of new reproductive technologies on women. This concern permeated the final report of the Royal Commission on New Reproductive Technologies, which served as the initial catalyst for the current Act.¹¹⁴

The list of principles in Section 2 of the Act are a clear enunciation of this anticommodification concern. Section 2(f) explicitly states:

trade in the reproductive capabilities of women and men and the exploitation of children, women and men for commercial ends raise health and ethical concerns that justify their prohibition.¹¹⁵

While Section 2 incorporates principles other than anti-commodification,¹¹⁶ anxiety over turning human beings into marketable goods by paying them for their biological materials is a hallmark of the AHRA. Indeed, this is what made some dimensions of the controlled activities so controversial. The controlled activities include reimbursement of expenditures incurred in the course of donating sperm or ova, and reimbursement of a surrogate mother for loss of work-related income incurred during pregnancy.¹¹⁷ Critics of this provision are concerned that "reimbursement" of expenses incurred in donating gametes is a euphemism for payment for those materials thus transforming a (virtuous) gift into a (objectionable) sale.¹¹⁸ This was one of the most debated provisions of the Act prior to enactment, and the newly

¹¹⁵ AHRA, s. 2(f).

¹¹⁶ Other principles recognized in section 2 of *AHRA* are "(a) the health and well-being of children born through the application of assisted human reproductive technologies must be given priority in all decisions respecting their use; (b) the benefits of assisted human reproductive technologies and related research for individuals, for families and for society in general can be most effectively secured by taking appropriate measures for the protection and promotion of human health, safety, dignity and rights in the use of these technologies and in related research; (c) while all persons are affected by these technologies, women more than men are directly and significantly affected by their application and the health and well-being of women must be protected in the application of these technologies; (d) the principle of free and informed consent must be promoted and applied as a fundamental condition of the use of human reproductive technologies; (e) persons who seek to undergo assisted reproduction procedures must not be discriminated against, including on the basis of their sexual orientation or marital status; (g) human individuality and diversity, and the integrity of the human genome, must be preserved and protected."

¹¹⁷ AHRA, s. 12.

¹¹⁸ Some scholars contest donations as altruistic for which there is no sense of trade since economic reciprocity can also imbue donations. See Williams, Joan & Zelizer, Viviana. "To Commodify or Not: That is Not the Question" in Martha Ertman & Joan Williams, eds., *Rethinking Commodification, supra* note 58 at 693.

Yunwei. "The Stem Cell Debate: Why Should It Matter to Animal Advocates?" (2008) 1 Stanford Journal of Animal Law and Policy (an online journal).

¹¹⁴ Canada, Proceed With Care: Final Report of the Royal Commission on New Reproductive Technologies (1993); Backhouse, Diana & Deckha, Maneesha. "Shifting Rationales: The Waning Influence of Feminism on Embryo Research Restrictions" (forthcoming in the Canadian Journal of Women and Law).

constituted Assisted Human Reproduction Agency of Canada is seeking to consult and pass appropriate regulations in response to this provision.¹¹⁹ The anxiety over the commodifying potential of even reimbursing receipted expenses is reflected in the Agency's decision to draw an early and presumably firm line distinguishing the reimbursement as merely facilitating donation.

The Act is clear, then, that human donors are not to be paid and that a corresponding market should not emerge in human reproductive materials. We see similar decisive articulations of species anxiety.

b) Species Anxiety

The Act prohibits (a) the transplantation of a human clone into any non-human life form; (b) transplantation of a sperm, ovum, embryo or foetus of a nonhuman life form into a human being; (c) the use of any human reproductive material or an in vitro embryo that is or was transplanted into a nonhuman life form for the purpose of creating a human being; (d) creation of a chimera or transplantation of a chimera into either a human being or a non-human life form; (e) creation of a hybrid for the purpose of reproduction, or transplantation of a hybrid into either a human being or a non-human life form; an or transplantation of a hybrid for the purpose of reproduction, or transplantation of a hybrid into either a human being or a non-human life form.¹²⁰ The Act defines a "chimera" as

(a) an embryo into which a cell of any non-human life form has been introduced; or

(b) an embryo that consists of cells of more than one embryo, foetus or human being.¹²¹

We have multiple examples then of prohibitions directed at the creation of human beings whose species identity could be disputed because they either gestated in a nonhuman life form, acted as surrogates for nonhuman life forms, have nonhuman genetic or reproductive material inside them, or would be the offspring of a human and a nonhuman parent.

i. Targeting human-animal mixing

It is clear that the anxiety centers on delineating the appropriate boundaries around the category "human" rather than all species. For example, the AHRA's embryo-centric definition of a "chimera" is narrower than the standard scientific definition of a "chimera," which is "an organism with two or more distinct

¹¹⁹ The first of the regulations was published in June, 2007 and came into force in December, 2007. Assisted Human Reproduction (Section 8 Consent) Regulations, SOR/2007-137, http://canadagazette.gc.ca/partII/2007/20070627/html/sor137-e.html. More than 20 regulations remain to be developed by Health Canada before the end of 2008. See Galloway, Gloria. "Ottawa Rejects Concerns Over Fertility Panel" *Globe and Mail*, December 28, 2006, at A4.

¹²⁰ AHRA, s. 5.

¹²¹ AHRA, s. 3.

populations of cells derived from separately fertilized embryos."¹²² One plausible reason for the inclusion of this restriction in the AHRA is a fear that any future being whose materials are mixed at this early and formative stage with an animal's or another human's runs a high risk of being integrally affected to the point that his or her species status and human identity is also put at risk. The Act also limits "chimeras" to embryos that have the potential to develop into full-blown organisms and excludes animals or humans who have already been born and, presumably under this logic, whose identities have already been clearly established.

The Act further narrows the definition of chimera by defining "embryo" as a *human* organism during the first 56 days of its development following fertilization or creation.¹²³ Based on this definition, only human embryos of an early developmental stage qualify as embryos. This is not merely a "sanctity of life" reverence for the human embryo since such pro-life arguments also extend to fetuses as well as embryos that are used for non-reproductive purposes.

The fact that the AHRA permits animal-human combinations with human fetuses and human embryos destined for research "also supports the idea that a 'speciescentric' view of human dignity underlies some of the prohibitions included in the Act..." since a new being will not result - or at least not one whose biological origins have been centrally intertwined with animal ones.¹²⁴ This limits the scope of "chimera" to exclude animal embryos that contain human cells even though their identity and status as animals might be affected. The Act only targets the tampering with human embryos and the creation of "animal-to-human" chimeras at this stage, i.e., human biological entities into which animal matter is introduced, without worrying about the introduction of human cells into animal embryos, i.e., "human-toanimal" chimeras. In doing so, the Act suggests that there is a premium on human dignity, which needs to be maintained for beings that start out as human and are recognized as human from this point forward, whereas beings who are perceived instead as "animal" may be tampered with more easily since they were never "human" in the first place and do not have a pre-existing dignity in an anthropocentric order.

Further evidence of the AHRA's focus on *human* species integrity is gleaned from its definition of what constitutes a "hybrid." In contrast to a chimera, which is a mixed organism at the cellular level, a hybrid is a mixed organism at the sub-cellular genetic or chromosomal level. In the absence of technological intervention, hybrids occur through sexual reproduction between species.¹²⁵ While both terms may apply

¹²² Kopinski, Nicole E. "Human-Nonhuman Chimeras: A Regulatory Proposal on the Blurring of Species Lines" (2004) 45 B.C. L. Rev. 619, at 624. While rare, human-human chimeras can occur naturally when two embryos merge into one *in utero*. Human individuals who are chimeras may exhibit eyes of different colours.

¹²³ AHRA, s. 3.

¹²⁴ Ibid. at 97.

¹²⁵ Humans have generated hybrids for centuries. For examples, a mule is a hybrid between a female horse and a male donkey. A mule has 63 chromosomes, 31 from donkey and 32 from horse. Because a mule has an odd number of chromosomes, a mule is usually infertile. A mule is useful to humans because it has the patience and endurance of a donkey

to the combination of two nonhuman beings through embryos, sperm, eggs, etc., the Act is careful to delimit the definition of hybrid to human-animal combinations.¹²⁶ Presumably, safety and health concerns influencing the ban on human-animal hybrids would also arise for animal-animal hybrids. This type of mixing, however, is not addressed, leaving open the interpretation that anxiety over human dignity is present, if not critical, to the prohibition's rationale.

ii. Within human-animal mixings, targeting embryonic and reproductive stages

Similar to only targeting commodification at the source, the Act does not prohibit all types of species mixing between humans and animals.¹²⁷ Although the Act prohibits many activities associated with the creation of "chimeras" and "hybrids," one interpretation of the Act suggests that it does not prohibit interspecies somatic cell nuclear transfer for research purposes, a process in which the nucleus of a human somatic cell is inserted into a nonhuman animal egg whose nucleus has been removed to create an embryo.¹²⁸ This gap is regarded as more of an oversight rather than acquiescence to this type of species intermingling.¹²⁹

More notably, human-animal xenotechnologies,¹³⁰ transgenics,¹³¹ and recombinant DNA procedures are not prohibited. It is only the reproductive or

and the strength and vigour of a horse. See American Donkey and Mule Society, "What is a Mule?" http://www.lovelongears.com/about_mules.html.

¹²⁶ The Act (s. 3) also defines a "hybrid" as

(a) a human ovum that has been fertilized by a sperm of a non-human life form;

(*b*) an ovum of a non-human life form that has been fertilized by a human sperm;

 (\boldsymbol{c}) a human ovum into which the nucleus of a cell of a non-human life form has been introduced;

 $\left(d\right)$ an ovum of a non-human life form into which the nucleus of a human cell has been introduced; or

(*e*) a human ovum or an ovum of a non-human life form that otherwise contains haploid sets of chromosomes from both a human being and a non-human life form.

¹²⁷ With respect to chimeras, the Act includes both human-animal and human-human combinations, intimating that both animality and "excessive humanity" threaten human dignity when introduced at the embryonic stage.

¹²⁸ Mykitiuk, Roxanne, Nisker, Jeff & Bluhm, Robyn. "The Canadian Assisted Human Reproduction Act: Protecting Women's Health While Potentially Allowing Human Somatic Cell Nuclear Transfer into Nonhuman Oocytes" (2007) 7(2) *Am. J. Bioethics* 71.

¹²⁹ *Ibid.* at 72.

¹³⁰ Broadly speaking, xenotransplantation is the transplantation of living cells, tissues, organs from one species to another. The Food and Drug Administration (FDA) in the United States defines xenotransplantation more narrowly as the transplantation into a *human* recipient of cells, tissues, organs from a *nonhuman* animal source. See FDA, "Xenotransplantation Action Plan: FDA Approach to the Regulation of Xenotransplantation," http://www.fda.gov/cber/xap/xap.htm.

embryonic mixing of species that is targeted, instances in which an offspring's membership in the human species is rendered unclear either because it is a hybrid and has a haploid set of chromosomes from an animal (from being the product of a human egg and animal sperm or vice versa), is an embryo that contains nonhuman cells or the cells of another human, or was a human embryo or fetus that started off in the body of an animal or vice versa. The introduction of non-reproductive cells whose spread and permeation throughout the body can be limited remains a legitimate research activity,¹³² as does the introduction of animal cells, tissues and organs into a human adult.¹³³ For example, the Act does not make it an offense to transplant an animal organ into an adult human, a practice that is widely accepted as life-saving for human beings waiting for a sparse supply of human organs.¹³⁴ This is the case even where the organ might be cloned.¹³⁵ Nor does the Act prohibit the insertion of nonhuman cells after the embryonic stage.¹³⁶

Another example that reveals the anxiety over animal-human reproduction is the continued authorization of scientists' ability to create a hybrid for *non-reproductive* purposes. Hybrid research is of scientific interest because it is a way to create valuable stem cell lines and develop cures for degenerative diseases such as Parkinson's or Alzheimer's disease without using human eggs.¹³⁷ This utility of hybridity to humans is trumped only when the hybrid is permitted to develop into a full being. Such a being transgresses the animal-human boundary line and, more importantly, will trouble human identity and the dignity that attends it as discussed above.¹³⁸ A hybrid for non-reproductive purposes does not threaten these boundaries.

Also, recall that the Act does not prevent the insertion of human genes into animals to create a human-to-animal being.¹³⁹ It is not merely neutral about this type of mixing. Rather, human-to-animal mixing (other than a reproductive hybrid) is a

¹³¹ Transgenics is the splicing of a gene from one species (animal, plant, bacteria, or virus) to the genome of another species. This happens through recombinant DNA technology which was developed in the late 1970s. The organism thus created is called a transgenic organism or genetically modified organism. A transgenic organism is neither a chimera nor a hybrid. The term "transgenics" is often interchangeable with "recombinant DNA technology." See generally, Watson, James. *Molecular Biology of the Gene* (Menlo Park, CA: Benjamin/Cummings, 1987) (A textbook written by Nobel Prize winner James Watson).

¹³² Scientists have routinely injected human cells (*e.g.* stem cells) into adult animals for research purposes. See Baylis & Fenton, *supra* note 45 at 45.

¹³³ Fox, *supra* note 83 at 149-67.

¹³⁴ *Ibid*.

 $^{^{135}}$ As noted above, subsection 5(1)(a) prohibits the creation of human clones and transplantation of human clones into non-human life, but not vice versa.

¹³⁶ Bordet et al., *supra* note 84 at 87.

¹³⁷ Mykitiuk et al., *supra* note 128 at 72.

¹³⁸ See, *infra*, text accompanying notes 78-85.

¹³⁹ This happens through recombinant DNA technology whereby a specific human gene is spliced into the genome of an animal, plant or bacterial cell.

controlled activity (subject to regulation and a license) to combine any part or any proportion of the human genome specified in the regulations with any part of the genome of a non-human species specified in the regulation. Since Health Canada did not develop the regulation for this section, it is not exactly clear what this controlled activity entails.¹⁴⁰ It is not surprising to see human-to-animal mixing as a permitted rather than prohibited activity due to the scientific hope that the study of human genes in non-human animal bodies will reveal the function of the genes and facilitate the discovery of new therapies or drugs for human diseases which are predicated on those genes.¹⁴¹ Again, this feature of the AHRA intimates that the anxiety is not about species mixing, especially where that mixing is seen to benefit humans.

The influence of species anxiety in the AHRA is reinforced by the fact that xenotechnologies involving different non-human species is not prohibited, although it may be subject to regulation.¹⁴² While it might be too much to expect a statute devoted to regulating assisted human reproduction to cover non-reproductive issues, such as non-reproductive xenotechnologies, the statute does seem to leave open the possibility of an overarching regulatory power to the AHRAC to control xenotechnologies through section 11.¹⁴³ It is plausible to infer, then, that had the legislators wanted to ban animal-animal chimeras, for example, or human-to-animal chimeras or xenotransplants, they would have done so. Instead, they have left these possibilities open despite the health risks that might attend these mixings. We are left to conclude that species anxiety over the proper boundaries of the human is a formative undercurrent of the Act.

Thus, despite these significant zones of permitted interspecies technology, the AHRA is best understood as a legal measure invested in maintaining certain species boundaries to preserve an anthropocentric concept of dignity. This interpretation is reflected in the government's consultation leading to the AHRA's enactment. As Sylvie Bordet, Sabrina Feldman and Bartha Maria Knoppers note, two provisions of the Act—one prohibiting the transplantation of non-human reproductive material in a human, and the other prohibiting the use for reproductive purposes of human

¹⁴⁰ The control of this type of transgenic experiments is surprising, since the insertion of human genes into bacterial or mouse genome is a widely used method in biomedical research. See Sambrook, Joseph, Fritsch, E.F. & Maniatis, Tom. *Molecular Cloning: A Laboratory Manual* (Cold Spring Harbor, NY: Cold Spring Harbor Laboratory Press, 1989). It is likely that this section will only apply to the combination of human genes to certain primate species that are closely related to humans.

¹⁴¹ For example, scientists have inserted the BRCA1 and BRCA2 genes, which are responsible for human familial breast cancer, into laboratory mice in order to understand their functions in tumorigenesis. See Moynahan, Mary. "The Cancer Connection: BRCA1 and BRCA2 Tumor Suppression in Mice and Humans" (2002) 21(58) *Oncogene* 8994. The famous Harvard Oncomouse, which was denied patent protection in Canada, also carries a specific human gene. See *Harvard College v. Canada, supra* note 88.

¹⁴² Since "species" refers to nonhuman life in the AHRA, section 11 of the AHRA dealing with controlled activities may be interpreted to apply to two nonhuman species mixing. See Bordet et al., *supra* note 84 discussing the work of Francoise Baylis.

¹⁴³ Bordet et al., *supra* note 84 at 89-90.

reproductive material or an *in vitro* embryo that had previously been in an animal reflect the House of Commons Standing Committee on Health's findings that such activities would violate human dignity.¹⁴⁴ That certain animal-human combinations are not deemed as serious to the notion of human dignity to be prohibited outright does not undermine the catalyzing role of human dignity concerns in the AHRA's enactment but underscores it. As Bordet et al. further note,

[t]he prohibitions in the AHRA appear to cluster around the exchange or combination of reproductive material or very early developmental material between species. They focus on cases in which the animal-human combination may affect the apparent "human" character of the resulting being, making it no longer wholly human. This tends to support a "species-centric" view of [human] dignity.¹⁴⁵

To stress this importance of species anxiety manifested as fears about human dignity in the AHRA does not deny that other concerns were influential to the AHRA's design. As indicated in section 2, the protection of human health, safety and individuality also emerge as core concerns for the statute. In her work, Fox has discussed the potential of xenotechnologies to transmit new viruses into the human community.¹⁴⁶ While such concerns are real and should be addressed, these foci simultaneously affirm the related concern about human dignity animating the Act. In addition to further evincing the anthropocentricism of the AHRA as these foci do, the focus on preserving human individuality is especially closely tied to human dignity, as part of what we commonly imagine to be a characteristic of being human that distinguishes us from animals is our individuality.¹⁴⁷ It is very likely the case that concerns related to health, safety and individuality, for example, inform the prohibition of animal-human chimeras, as well as human-human chimeras. Yet, the fact that animal-animal chimeras are not prohibited fortifies a conclusion that it is the protection of *human* health, safety and individuality that animates the AHRA; when pressed about such a distinction, it would likely circle back to human specialness and our elevated dignity.

Yet, it is not necessary to resort to these concerns for health, safety, or individuality to understand the presence of anxiety about species demarcations inhabiting the statute and the underlying species prejudice that generates it. What the analysis in this Part reveals is the twin quest for defining the human, which lies at its heart. The restrictions on trade in human reproductive materials are aimed at distinguishing humans from commodities. Humans are persons; mere things, like animals, are commodities to be bought and sold. Capitalism, which is otherwise to be encouraged, meets one of its few limits in contemporary late modernist society in the form of a precarious human dignity in need of recuperation and preservation.

Having dealt with commodification, the Act proceeds to escape another threat posed by new reproductive technologies to human dignity – animalization – through

¹⁴⁴ *Ibid.* at 95-97.

¹⁴⁵ *Ibid.* at 96.

¹⁴⁶ Fox, *supra* note 83 at 151-152.

¹⁴⁷ Bordet et al., *supra* note 84 at 98.

the prohibitions against hybrids and chimeras. By attempting to forecast all the probable ways that scientists might create a being that may be perceived as only part human because of mixed reproductive origins or adulterations at the embryonic stage, the Act precludes the existence of any future beings whose claim to dignity is cast in doubt because they are not fully human. Animal-human combinations outside of the reproductive or embryonic stage, while not without ethical implications, are tolerated. This is because the end product/being is not seen to be so compromised in its biological origins and ensuing species membership; at the same time, it may yield scientific benefit in relation to human gene and cell therapies.¹⁴⁸ How this contribution of the AHRA to the historical discourse of humanism impacts the quest for greater legal and ethical regard for animals is the focus of the next Part.

Part IV: AHRA and the Need for a Posthumanist Orientation

Having reviewed the ways in which the AHRA is anxious about commodification and the blurring of species boundaries, we are now able to consider why investment in an exclusive dignity claim for humans cannot be read as neutral, but instead calls for posthumanist reform. This Part develops the argument for a posthumanist intervention by: a) emphasizing the exclusivity of the AHRA's dignity claim; and b) providing a response to well-intentioned and egalitarian objections to posthumanist change.

a) AHRA and an exclusionary dignity claim

The new biotechnologies have not occupied the landscapes of animal advocacy campaigns in any prominent way.¹⁴⁹ And while animal movements face a multitude of animal-based industries to cover, it would be a mistake to miss biotechnologies as an arena for posthumanist critique, especially since most ethical analyses regarding commodification and the creation of hybrids and chimeras have not incorporated let alone adopted the insights of animal ethics literature questioning the subordinate moral status of animals.¹⁵⁰ As we have seen, the implicit and explicit discourse striving to preserve human dignity while reserving a sense of human specialness is one that undercuts a posthuman ethic of ordering the world. To be clear, the human claim for dignity is not the problem, objections to the use of this term to operationalize equality in law notwithstanding.¹⁵¹ Dignity may well be a desirable

¹⁴⁸ *Ibid.* at 99.

¹⁴⁹ Notable exceptions to this are Marie Fox and Carol Adams. Fox, *supra* note 83; Adams, Carol. *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory* (New York: Continuum, 1990).

¹⁵⁰ DeGrazia, *supra* note 87 at 311.

¹⁵¹ I do not wish to diminish the debate within constitutional jurisprudence and elsewhere regarding the utility of dignity, as opposed to concepts of equality, autonomy, well-being, as a

concept to retain for humans and animals both. But what needs to be interrogated is its deliberate and guarded restriction to a particular species identity both in the AHRA and everywhere else.¹⁵²

In this regard, the Act is not too far removed from the eighteenth and nineteenth century discourses explored above in the anxiety it professes.¹⁵³ As Lancaster has noted with respect to new reproductive technologies, despite the destabilizing promise of these molecular technologies on entrenched hegemonic norms of family formation, peoples' narratives of assistive reproductive technologies view the traditional model of the heterosexual nuclear family as a "natural" impulse.¹⁵⁴ With this point, Lancaster stresses that the discourse of naturalism, remarkably, still permeates the practice of clinical technologies that enable reproduction in very "unnatural" ways. In a similar vein, the AHRA levels off differences between humans by exhibiting commodification anxiety for the benefit of not just a privileged elite but for all humans, and marginalized women in particular, who will likely be the source of reproductive materials for the more affluent classes. These are progressive steps to be sure. Yet, read from another perspective, in refusing to extend commodification and dignity concerns to animals but rather actually deliberately (desperately?) instantiating boundary lines between humans and animals, the Act is remarkably exclusive and modernist in staging human rights and its understanding of the concept of dignity.

b) A posthumanist response

Animal advocates worried about exclusionary claims to dignity and other shapers of ethical treatment need to intervene in new reproductive statutes such as the AHRA. Before setting out what this intervention would look like, I want to address here four reasons that may impede the acceptance of this position even by those sympathetic to posthumanist concerns. These reasons relate to the possible deleterious aspects of any posthumanist intervention on the socially progressive aspects of the AHRA. While the reasons below deserve serious consideration, this section shows why they are not persuasive as grounds to resist reform of the AHRA from a posthumanist perspective.

i. AHRA's anthropocentric focus is legitimate

One impediment to the argument's acceptance is that it may be possible to read the AHRA's concern about human dignity not so much as an indictment of animals, but as a legal measure to protect women and other marginalized groups whose bodies are placed at the most risk from the technologies at issue. This is, in fact, an argument

concept to capture our human rights commitments and egalitarian sensibilities. Entering this debate is not possible in this paper. For details of this debate, please see Fyfe, *supra* note 74.

¹⁵² Ash, Kyle. "International Animal Rights: Speciesism and Exclusionary Human Dignity" (2005) 11 Animal L. 195 at 196.

¹⁵³ Corbey, *supra* note 17 at 60-92.

¹⁵⁴ Lancaster, *supra* note 24 at 286-87.

that some scholars have made regarding the intent of the AHRA.¹⁵⁵ Imagine for a moment that the same feminist argumentation that informed the enactment of the AHRA is also one that would seek to dismantle the system of animal exploitation on which our society is based. Could it not be acceptable to legislate to protect women from the commercialization of their bodies while not protesting within that same piece of legislation the commodification of animal bodies? And could we not interpret the AHRA in this regard, i.e., as targeting the former exploitation, but not the latter? Moreover, why should a statute seeking to regulate *human* assisted reproduction have to make a statement against the commodification of *nonhuman* animals?

In the context of evaluating, from an intersectional perspective which seeks to be responsive to and enable the resistance of all marginalized communities,¹⁵⁶ the ethics of advocating on behalf of one disadvantaged group while remaining silent about the situation of another, I have argued elsewhere that it is impractical to demand a complete and comprehensive campaign at every moment of political agitation.¹⁵⁷ Only where the discourses or techniques of one marginalized group actually or foreseeably impair the conditions of another does a problem arise.¹⁵⁸ Applying this principle to the AHRA might salvage its commodification concern particularly since much of this concern is directed toward the bodies of women.¹⁵⁹ By contemplating the dignity peril to women's bodies and the forecasted demand for their eggs, how lamentable is it that the focus is not also on the widespread instrumentalization of animal bodies? After all, there is no explicit suggestion in this Act that animals *should* be commodified. In other words, the statute expresses the commodification and species anxiety without making the condition of animals worse off.

¹⁵⁵ Baylis, Françoise & McInnes, Caroline. Women at Risk: Embryonic and Fetal Research in Canada (2008) 1 *McGill Health Law Publication* 53 at 54-55. See also Caulfield & Bubela, *supra* note 111.

¹⁵⁶ Intersectionality within feminism asks that analyses not automatically assume that women have shared interests or come from a shared social position, but recognize "the need to account for multiple grounds of identity when considering how the social world is constructed." Crenshaw, Kimberle. "Intersectionality and Identity Politics: Learning from Violence Against Women of Colour", in Shanley, Mary Lyndon and Narayan, Uma (eds.) *Reconstructing Political Theory: Feminist Perspectives* (University Park, PA: Penn State University Press, 1997) 178 at 180. The concept of intersectionality alludes to the critical importance that other axes of power and difference in society and culture – race, class, sexual orientation, age, ability, etc. – play in structuring the gendered experiences women have and the overall identities of women. See also: Kline, Marlee. "Race, Racism, and Feminist Legal Theory" (1989) 12 *Harvard Women's Law Journal* 115; Crenshaw, Kimberle. "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics" (1989) *University of Chicago Legal Forum* 139.

¹⁵⁷ Deckha, Maneesha. "Is Culture Taboo?: Feminism, Intersectionality, and Culture Talk in Law" (2004) 16:1 *C.7. W.L.* 14 at 30.

¹⁵⁸ Ibid. at 31.

¹⁵⁹ Baylis & McInnes, *supra* note 155.

Yet, the commodification anxiety that is expressed is not conveyed in a climate of merely focusing on women and then attending to animals later. Rather, it is proffered in a legal and cultural climate that disregards the vast majority of animals and creates a specific statutory context that is devoted to carefully maintaining a species boundary between humans and nonhumans. Even if we were to impute a benign animal-friendly intention to Parliament in passing the AHRA, the result is a document that participates in a humanist discourse that seeks to maintain a special *hierarchical* status for human beings. And it does this actively by perpetuating commodification and species anxiety and a sharp divide between humans and animals when technologies threaten to blur them together. Again, it is this element of the statute that distinguishes it from, say, a human rights code. The focuses of such codes do not typically coalesce on demarcating the species boundary and actively creating the human parameters of the dignity concept. That the AHRA does in fact do this is its problematic dimension.

ii. Species is a productive category of distinction

A second, more challenging objection to the posthumanist argument presented here, relates to the undesirability of blurring species boundaries. Even assuming that one could produce viable hybrids or more than "mild," to adopt David DeGrazia's term, chimeras that did not pose any health risks to either humans or nonhumans, are there not reasons for maintaining a sense of species identity as we do gender or racial identity?¹⁶⁰ Is it always the case that the concept of species is morally fraught because of its questionable origins, production, and scope?¹⁶¹ In other words, does a posthumanist ethic demand the renunciation of the species boundary? It would take more space than I have here to canvass this question properly. Assuming, however, that the ideas of "species," "human," and "animal" can subsist in a posthumanist world (in much the same way that concepts of "gender," "man," and "woman" may circulate within a feminist one), this insight does not address the issue of why reproductive species mixing is usually immediately foreclosed by ethicists, policymakers and regulators. Though biological infeasibility of the combination is a valid reason for preventing such research/experimentation, it takes only a cursory review of the debates and discourse leading up to the AHRA to see that the "yuck" factor was influential in generating the prohibitions.¹⁶² More commonly discussed in

¹⁶⁰ DeGrazia, *supra* note 87 at 309, referring to "rodents with human skin, muscle tissue, or immune systems, for example, and humans with pig heart valves to improve cardiac function."

¹⁶¹ Elstein, *supra* note 62.

¹⁶² Kass, Leon. "Reflections on Public Bioethics: a View from the Trenches" (2005) 15(3) *Kennedy Inst. Ethics J.* 221. For examples within the debates, see Castonguay, Jeannot. In Canada. Parliament. House of Commons. *Debates.* 37th Parliament, 2nd Session, Vol. 82 (April 1, 2003) pp. 5007-5009; Merrifield, Rob. In Canada. Parliament. House of Commons. *Debates.* 37th Parliament, 2nd Session, Vol. 82 (April 1, 2003) pp. 5010-5013; Kenney, Jason. In Canada. Parliament. House of Commons. *Debates.* 37th Parliament, 2nd Session, Vol. 57 (February 11, 2003) pp. 3400.

the context of human reproductive cloning, the "yuck" factor relates to the process of deciding an ethical question by how a particular result makes us feel. If something feels "yucky," abhorrent, repulsive, etc., then that affective response should be regarded as a serious guidepost as to how the issue should be resolved.¹⁶³

While the assigning of importance to affect is a welcome development in ethics and politics in general to counter the tyranny of reason and its checkered legacy,¹⁶⁴ the danger of listening to a "yuck" response resides in the fact that prejudices and hegemonic norms may cultivate that response.¹⁶⁵ Given that it is still part of our cultural landscape to show respect to humans by upholding a hierarchy designating them superior to other beings, it must be acknowledged that any negative "intuition" we might have about interspecies mixing is related to a worldview that casts animals generally as abject and has been repelled and fascinated by ideas of hybrids as "monstrosities" of nature and evil.¹⁶⁶ "Intuitively" responding negatively to species transgressions as "monstrosities" also sustains cultural ideas that not only structure species, but gender, race, class and ability categories and hierarchies among humans.¹⁶⁷ Though the idea of species difference can subsist in a social order that treats animals in an egalitarian manner, the manner in which it operates in the AHRA undermines and actively resists such a posthumanist social order.

iii. Fragile humanity protected

But there may be another reason still to salvage the idea of species integrity despite its biological deconstruction by both biologists and social theorists. This is an argument from human dignity, but not the one outlined above that is typically discussed in the literature and offered by regulators as grounds for prohibitions.¹⁶⁸ The dignity argument I wish to raise here, but eventually refute, is different. Its target for preservation is not universal human privilege, but the fragile and recent human status for marginalized human groups. Recalling the discussion of PETA's antislavery campaign above,¹⁶⁹ a second argument for dignity which might attract more sympathy from posthumanists, many who, of course, are also committed to dignity for humans, is as follows: the disintegrating of human dignity will likely visit a

¹⁶³ The "yuck factor," also known as the "wisdom of repugnance" was coined by Leon Kass. See Kass, Leon. "The Wisdom of Repugnance", in Kass, Leon and Wilson, James. *The Ethics of Human Cloning* (Washington: AEI Press, 1998) at 3-59.

¹⁶⁴ See, generally, Nussbaum, Martha. *Upheavals of Thought: The Intelligence of Emotions* (New York: Cambridge University Press, 2001).

¹⁶⁵ Harris, John. Clones, Genes, and Immortality: Ethics and the Genetic Revolution (Oxford: Oxford University Press, 1998) at 37.

¹⁶⁶ Baylis & Robert, *supra* note 7 at 7; Ritvo, *supra* note 40; Ravelengien et al., *supra* note 23 at 3.

¹⁶⁷ Waldby & Squier, *supra* note 7 at 39.

¹⁶⁸ Cooper, Melinda. "Resuscitations: Stem Cells and Crisis of Old Age" (2006) 12: 1 *Body Society* 1 at 13.

¹⁶⁹ See *supra* note 65 and accompanying text.

disproportionate adverse effect on those marginal humans who have just laid claim to this status. Thus, the concern is not so much about latching onto human privilege at all cost but not denying racialized peoples, people with disabilities, indigenous peoples, etc. a status that they have only recently held because of colonizing and modernist narratives of paradigmatic and model humans and human cultures.

As we have seen, however, these same narratives were heavily implicated in creating a species hierarchy and vice versa. Permitting the fixed sense of species to dialectics (Culture/Nature, Reason/Emotion, prevail perpetuates dualistic Mind/Body, etc.) that were responsible for the social orders that subordinated marginal humans.¹⁷⁰ Indeed, the focus on "classificatory status" sometimes positions the central issue as that of whether animal-to-human chimeras resulting from experimental procedures ought to be considered "animal" or "human," in a manner reminiscent of the American one drop-rule used in distinguishing Blacks (the "inferior" race) from whites (the exalted beings deserving of dignity).¹⁷¹ Thus, this third objection and slight variation on the standard dignity argument is also unsatisfying and even disappointing to animal advocates and human advocates who appreciate the mutually constitutive and intersectional nature of ideas of species, race, and gender.¹⁷² Reinscribing a humanist focus in ethics is problematic not just for animals who are Othered, but for marginalized human actors as well since the aforementioned binaries that are triggered in the process of animal Othering continue to inform human relations of power.¹⁷³

Conclusion

The modernist tradition of humanism is engaged in a project of knowledge production that figures animal bodies in relation to human subjects. In the 19th century, social Darwinism combined insights from evolutionary biology with Western models of hierarchal organization, supporting a discourse that was only too willing to blur the species boundaries between animals and racialized, non-Western humans. The threat posed to human dignity by scientific narratives debunking entrenched norms of human uniqueness and specialness was alleviated by a narrative that cast European, propertied males as having, in contrast to their ancestors and contemporaneous racialized non-Europeans and marginalized individuals in their own societies, reached the end of their development and had become "civilized." Through this juxtaposition, humanity was defined as that which it was not. While the fluidity and constructedness of species are acknowledged in contemporary biology, the social construction of species difference persists and continues to be inflected by

¹⁷⁰ Rossiianov, Kirill. "Beyond Species: Ilya Ivanov and His Experiments on Cross-Breeding Humans with Anthropoid Apes" (2002) 15(2) *Science in Context* 277 at 279.

¹⁷¹ See, e.g., Greely et al. "Thinking About the Human Neuron Mouse" (2007) 7:5 *Am. J. Bioethics* 27. For details on this racist rule see Baylis & Robert, *supra* note 7, at 8; Harris, Cheryl I. "Whiteness as Property" (1993) 106(8) *Harv. L. R.* 1707.

¹⁷² See discussion of Corbey, *infra*, in text accompanying footnotes 24-38.

¹⁷³ Deckha, *supra* note 26; Adams, *supra* note 149.

currents of race, gender, culture, sexuality and other seemingly anthropogenic concepts. There is a continuing impulse to articulate human identity as the marker for ethical consideration and animal identity as the excluded Other.

The AHRA participates in this modernist narrative, defining human dignity in relation to animal commodification. In embodying commodification and species anxiety through its prohibitive provisions, the AHRA contributes to this long-standing narrative within Western cultures of articulating, with mixed success, human identity through juxtaposing it with imagined ideas of animality. The AHRA creates a specific statutory climate that perpetuates this boundary drawing. It is devoted to the maintenance of a sharp divide between humans and nonhumans, which is reflected in the exclusionary conception of dignity adopted by the Act. The manner in which anti-commodification anxiety and species difference operate in the AHRA undermines and actively resists a posthumanist social order in which animals would be treated in an egalitarian manner.

Critics who care about animals and would like to see the concept of dignity extended to animals and a general posthuman order develop need to have anxiety themselves about the AHRA. The Act fails to contextualize its rationales for what may otherwise be ethically sound reasons for avoiding human commodification and reproductive intermingling with other species in a way that connotes concern for animals. The impression is left that the quest for human dignity is again elicited at the expense of nonhumans. In articulating these ideas, the Act strengthens humanism's inegalitarian and subordinating dialectic against both marginalized humans and nonhumans. Although far-reaching institutional change to remove animals from Canada's xenotechnology and other research spaces seems unlikely to occur in the near future, beneficial posthumanist measures for animals should be incorporated. Dignity and the values that attend it need to extend beyond human borders.