An Ecofeminist Analysis of *In Vitro* Fertilization

by

Christine Marie Cécile Legal

A Thesis submitted to the Faculty of the University of St. Michael’s College and the Theology Department of the Toronto School of Theology in partial fulfilment of the requirements for the degree of Master of Arts in Theology awarded by the University of St. Michael’s College.

© Copyright by Christine Legal 2015
An Ecofeminist Analysis of *In Vitro* Fertilization

Christine Marie Cécile Legal
Master of Arts in Theology
University of St. Michael’s College

2015

Abstract

Ecofeminist theory states that the oppression of women and the oppression of other-than-human Nature stem from the same patriarchal and hierarchical ideologies that legitimate all relationships of domination between humans, and between humans and their environment. The dualistic presuppositions of such ideologies imply an additional dualism between God and Creation. However, these dualisms are overcome by Christ’s Incarnation which extends divine salvation to all Creation and inaugurates God’s reign of peace and justice for all. *In vitro* fertilization makes a particularly good case study for ecofeminist theology since women and other-than-human Creation are sometimes harmed by IVF in a way that compromises their health and promotes divisive hierarchical dualisms. I contend that these harms reflect a devaluation of physical Creation, which is contrary to Christ’s inclusive Incarnation and impedes the actualization of God’s reign here on Earth. Thus, IVF is not a morally acceptable solution to infertility.
Acknowledgements

To all of my professors and colleagues in Toronto and Winnipeg, who introduced me to ecofeminist theology and offered endless guidance and encouragement along the way. Thanks especially to Dr. Dennis O’Hara, who oversaw the majority of my coursework at St. Michael’s and directed this thesis.

To my family, who offered countless hours of babysitting, home-cooked meals, continuous words of support, and library delivery service.

To my husband, who lovingly endured two cross-country moves and everything else that being married to a graduate student entails.

Forever with gratitude and love.

pour Sophie
# Table of Contents

Acknowledgements .......................................................................................................................... iii

Table of Contents.......................................................................................................................... iv

Introduction........................................................................................................................................ 1

a. Context and Thesis Statement ................................................................................................. 1
b. Current Research ...................................................................................................................... 3
c. Method ......................................................................................................................................... 9
   i. Presuppositions ....................................................................................................................... 9
   ii. Ecofeminist Methodology ..................................................................................................... 11
d. Procedure .................................................................................................................................... 15
e. Implications .................................................................................................................................. 18

Chapter 1: Medical Aspects of IVF ............................................................................................. 19

a. Medical Procedure ................................................................................................................... 19
b. Women and IVF ........................................................................................................................ 22
c. Regulation and Data Collection ............................................................................................. 26
d. Conclusion .................................................................................................................................. 30

Chapter 2: IVF Controversies ..................................................................................................... 32

a. Medical Controversies .............................................................................................................. 32
b. Legal and Economic Challenges ............................................................................................ 36
c. Socio-political Implications ..................................................................................................... 39
d. Theological Concerns .............................................................................................................. 43
   i. Roman Catholicism ............................................................................................................... 47
ii. IVF, Women and the Environment ................................................................. 51

Chapter 3: Ecofeminism and IVF ......................................................................... 55

a. Ecofeminist Bioethics ......................................................................................... 55

b. Feminist Critique .................................................................................................. 63

c. In Defence of IVF .................................................................................................. 67

d. An Ecofeminist Critique of IVF ........................................................................... 69

i. Medicalization and Privatization of Reproduction ............................................ 69

ii. Overconsumption of Resources ......................................................................... 74

iii. Pollution of Bodies & Ecosystems .................................................................... 77

iv. Women, Patriarchy and the Environmental Crisis .............................................. 80

v. IVF & Ecofeminist Ethical Principles .................................................................... 86

e. Conclusion ........................................................................................................... 89

Chapter 4: Ethical and Theological Implications .................................................... 91

a. Ecofeminism: A Theology of Life ....................................................................... 91

b. IVF, Ecofeminism and the Magisterium: A Final Analysis ................................. 98

c. Implications .......................................................................................................... 103

d. Conclusion ........................................................................................................... 108

Conclusion ............................................................................................................. 110

a. IVF: Facts and Controversies .............................................................................. 110

b. IVF and Ecofeminism ............................................................................................ 112

c. Ethical and Theological Implications .................................................................... 115

Bibliography ........................................................................................................... 118
Introduction

Context and Thesis Statement

One of the basic insights of ecofeminist theory is that the oppression of women and the oppression of other-than-human nature ultimately stem from the same patriarchal and hierarchical ideologies that legitimate relationships of domination between humans, and between humans and their environment.¹ One of the major theological consequences of this, according to Elizabeth A. Johnson, is that the dualistic presuppositions of such ideologies (man/woman, soul/body, culture/nature) imply an additional dualism between God and Creation, where God is “essentially separated from and over against the world.”² However, Christ’s Incarnation overcomes all these dualisms: by taking on flesh (sarx) and not merely human form (anthropos), Christ’s divine salvation is extended to all Creation since flesh is made of Earth and formed through Earth’s evolutionary processes. Sexist and environmentally degrading social structures that favour divisive hierarchical dualisms between men and women and between humans and the rest of Creation, therefore, are immoral since they fail to reflect this all-inclusive, Incarnate love, and hinder the concrete, embodied actualization of God’s reign of peace and justice which Jesus’ earthly mission inaugurated.³

Artificial reproductive technologies such as in vitro fertilization (IVF) make a particularly good case study for ecofeminist theology, because women are the primary consumers of these technologies, and because of the way unjust dualisms of man/woman and human/other-than-

---

human are played out in the bodies of women who receive fertility treatments. IVF in particular involves medically intensive treatments, is often undergone by a patient who does not medically require it (that is, by women whose husbands suffer from infertility, although they have presumably requested and given their informed consent for treatment), and may cause high levels of physical and psychological pain, as reported by women IVF-users. As such, women’s and environmental concerns intersect in IVF on at least four points:

a) the medicalization and privatization of reproduction in IVF, which politically disenfranchise women and mask the important environmental factors that may contribute to infertility;

b) the overconsumption of resources in IVF, which represents a disproportionately large percentage of global healthcare expenditures;

c) the use of unsafe techniques and pharmaceuticals, which pollute both women’s bodies and the other-than-human environment;


5 The point here is not to criticize the entire medical profession, since quality medical and reproductive care are necessary for women’s well-being; rather, “medicalization” here is intended to denote the way in which reproductive issues may be framed as solely medical issues—i.e., purely a matter of personal physical health and illness, fixable by individual treatment, rather than as issues with important social, religious, economic, environmental and especially political dimensions as well—such that reproduction becomes controlled by medical experts in order to make it better meet social norms. See, e.g.: Greta Gaard, “Reproductive Technology, Or Reproductive Justice? an Ecofeminist, Environmental Justice Perspective on the Rhetoric of Choice,” *Ethics & the Environment* 15, no. 2 (2010): 105; Sarah Jane Brubaker and Heather E. Dillaway, “Re-Examining the Meanings of Childbirth: Beyond Gender and the ‘Natural’ Versus ‘Medical’ Dichotomy,” *Advances in Gender Research* 12 (2008): 219; Susan Sherwin, “Feminist Ethics and in Vitro Fertilization,” in *Biomedical Ethics*, ed. Thomas A. Mappes and David DeGrazia, 6th ed. (Toronto: McGraw-Hill, 2005), 551; Lisa Sowle Cahill, “Genetics, Ethics and Feminist Theology: Some Recent Directions,” *Journal of Feminist Studies in Religion* 18, no. 2 (2002): 66.

6 It is now widely known that pharmaceutical pollutants and other exogenous endocrine disrupters, including excreted contraceptive drugs, are having adverse effects on the development and reproductive fitness of aquatic species as well as human populations. Some of these drugs, e.g., levonorgestrel, a second generation oral contraceptive, are also used in IVF. See: Ingvar Brandt et al., ed. *Pharmaceuticals in a Healthy Environment: MistraPharma Research 2008–2011* (Stockholm: MistraPharma, 2012), 18-19; Augustine Arukwe, “Cellular and Molecular Responses to Endocrine-Modulators and the Impact on Fish Reproduction,” *Marine Pollution Bulletin* 42,
d) the compartmentalization and commodification of women’s bodies in IVF, which reflect the same patriarchal values that have contributed to the current environmental crisis.

Christ’s fleshly Incarnation tells us that bodies matter. These intersection points, however, suggest how the bodies of women and other-than-human Creation are sometimes harmed by IVF in a way that compromises their health and promotes divisive hierarchical dualisms which value some bodies (those of men) over others (those of women and the other-than-human). I contend, therefore, that, in general, IVF harms women and other-than-human Nature, and that this reflects a devaluation of physical Creation, which is contrary to Christ’s inclusive Incarnation and impedes the actualization of God’s reign here on Earth. Thus, an ecofeminist analysis must reject IVF as a morally acceptable solution to the problem of infertility because it both embodies and perpetuates oppressive attitudes about women and other-than-human Nature, which, ultimately, fail to respect their full dignity as God’s beloved creations and full participants in the divine plan of cosmic salvation.

Current Research

No consensus exists concerning the morality of in vitro fertilization. In the medical field, IVF is generally considered to be fundamentally morally sound,\(^7\) although ethicists and practitioners express concern over particular issues related to IVF, e.g., risks associated with multiple births,\(^8\) possible congenital abnormalities in IVF-conceived children,\(^9\) and questions

---


about public funding of IVF and other ARTs. In Canada and abroad, governments have identified a number of problematic issues (e.g., the status of embryos, women’s safety and autonomy, the commercial exploitation of people’s reproductive capacities), but have tended to agree on the basic morality of IVF. Overall, however, there is very little research about the efficacy and long-term safety of IVF for either parents or children. This in itself has raised some ethical concern, though the lack of data is beginning to be addressed by the mandatory and voluntary collection of data at national and international levels.

Important research concerning the legal and social implications of IVF is also beginning to emerge in the literature. In many cases, support of IVF and related technologies is founded on


12 Dondorp, Innovative Reproductive Technologies, 1604-08.

13 E.g., the Canadian Assisted Reproductive Technologies Register (CARTR) and the International Committee for Monitoring Assisted Reproductive Technologies (ICMART). All CARTR annual reports are available on the Canadian Fertility and Andrology Society website, www.cfas.ca. The most current published data are for 2011. ICMART annual reports are available on the ICMART website, www.icmartivf.org. The most current published data are for 2004 and include data from all continents, although most Asian and African countries are not represented.
a desire to protect reproductive autonomy and avoid undue discrimination. Others question, however, whether the creation of specific types of children through IVF is fundamentally incompatible with the sort of unconditional love and acceptance of children that we expect from parents, and whether there are reasonable limits to procreative liberty. Related to this question are the difficult issues of the legal status of embryos and the disposal of embryos when parents divorce, pass away, or go missing. Indeed, IVF is challenging common perceptions of the normative heterosexual, nuclear family, and the literature and media abound with case studies of single people, postmenopausal women, gay and lesbian couples and people with posthumous gametes of spouses or children, all seeking access to this technology. The use of donor gametes

---


further complicates matters as ethicists and legislators struggle to balance the rights of donors to anonymity and the rights of offspring to know their full genetic identity.\textsuperscript{19} Surrogacy adds yet another layer of complexity to the issue as it challenges assumed conceptions of motherhood and forces courts to decide, e.g., who a child’s “real” mother is, or if a woman can profit commercially from producing children.\textsuperscript{20} Informed consent has also been an important theme of legal and ethical inquiry, not only in terms of adult participants being exposed to uncertain risks of IVF,\textsuperscript{21} but also for potential offspring who may be considered the subjects of experimental procedures which are not clearly beneficial to their (potential) health.\textsuperscript{22} Language and cultural barriers can exacerbate problems of informed consent, especially in the context of cross-border reproductive care (CBRC, “fertility tourism”).\textsuperscript{23}


\textsuperscript{20} Drabiak et al., \textit{Ethics, Law, and Commercial Surrogacy}, 300-09; Reilly, \textit{Surrogate Pregnancy}, 483-85.


\textsuperscript{22} Erin L. Nelson, “Legal and Ethical Issues in ART “Outcomes” Research,” \textit{Health Law Journal} 13 (2005): 165-86. Garrison argues that while adults ought to be permitted to undergo risky treatments, such as experimental ART procedures, these “potential parents” ought not be permitted to put their future children at serious medical risk through these same procedures, thereby highlighting the complex and sometimes competing interests that emerge when considering the informed consent of patients, children and care providers. Marsha Garrison, “Regulating Reproduction,” \textit{The George Washington Law Review} 76, no. 6 (2008): 1656.

Religious responses to IVF have also been varied, with concerns over “playing God,” the commodification and destruction of embryonic life, and the exclusivity of marriage. The Roman Catholic magisterium objects especially to the destruction of embryos that normally occurs during IVF, as well as the separation of the procreative and unitive aspects of marriage that IVF entails and which, the magisterium argues, violates the Natural Law. By contrast, many Protestant and other non-Roman Catholic Churches generally condone ARTs, including IVF, provided the utilized gametes belong to married spouses and there is no wastage or deliberate destruction of embryos. Thus, fetus and embryo welfare are a primary theme of Christian thought on IVF, even when the technology is condoned.

Feminists have been equally split in their analysis of IVF, with many who welcome IVF as liberatory for women by offering them more control over the timing and circumstances of their reproductive choices, and others who view IVF with suspicion, skeptical of the quality of


choices offered by IVF. In addition feminists have questioned the role of IVF in supporting global economic injustices between rich and poor women who can and cannot, respectively, afford infertility treatments, and in challenging patriarchal family and parenting models. In both religious and secular discourse, feminist authors have been motivated by concerns for women’s autonomy and self-determination, women’s physical and emotional health and bodily integrity, and philosophical conceptions of women implied by the scientific values inherent in IVF. Margaret Farley has articulated an influential feminist theological ethic based on the values of equality, mutuality, autonomy and relationality. For her, the primary question about IVF must be: “does in vitro fertilization violate (or is it in accord with) feminist understandings of embodiment, norms for relationships, and concerns for the common good?”

IVF, however, has not been a major focus of ecological concern, except perhaps tangentially as a matter of human population control. Two exceptions are Greta Gaard and Laura Corradi, who have each advanced an ecofeminist analysis of IVF which is suspicious of the choice offered by ARTs and which questions the safety of these procedures for women’s health. To date, however, there has not been a specifically theological ecofeminist response to

---


33 Gaard, *Reproductive Technology, or Reproductive Justice?*, 103-29; Laura Corradi, “Redefining ‘Reproductive Rights’: An Ecofeminist Perspective on *In Vitro* Fertilization, Egg Markets and Surrogate
IVF. In other words, what is now necessary is to bring together the concerns of religious institutions and ecofeminists, and to ground the work of women such as Gaard and Corradi in the Church’s Tradition of Christ’s saving, loving and all-inclusive Incarnation. Such an analysis seeks to base the Roman Catholic Church’s concerns about IVF and other ARTs in the real, lived experience of women and other-than-human Nature, while also providing a sound theological basis for the moral considerability of women and the other-than-human, without which ecofeminist claims may prove to be ultimately groundless.

Method

Presuppositions

This thesis will employ an ecofeminist methodology to evaluate the ethical and theological implications of IVF. However, it is beyond the scope of the thesis to evaluate the merits and limitations of feminist and ecofeminist theory as such. Since feminist and ecofeminist theory are well-established within academic discourse – although, like many areas of academic discourse, they are not universally accepted – I have presupposed, therefore, the validity of a feminist/ecofeminist analytical framework, and will employ the commonly accepted methodology and language of this academic tradition. This includes the use of such foundational terms as “oppression” to denote the myriad interlocking ways, both explicit and subtle, in which

---

34 To say that women and other-than-human Nature are morally considerable is simply to say that they matter (or ought to matter) morally: i.e., they can make moral claims on others, and they can be harmed in a morally relevant way when those claims are not respected. E.g., a rock is probably not morally considerable since we cannot harm it in any substantial way, but a cat may be morally considerable if we grant that it can be harmed (for instance, by stepping on it) and that it therefore possesses certain moral rights (e.g., to bodily integrity, to not be stepped upon). Lori Gruen, “The Moral Status of Animals,” The Stanford Encyclopedia of Philosophy, ed. Edward N. Zalta (Winter 2012), http://plato.stanford.edu/archives/win2012/entries/moral-animal/.

women and other ontological groups are constrained and devalued compared to men, and “patriarchy” as the overarching social and political framework within which this oppression occurs.\textsuperscript{36} I will also employ personal experience as a well-established and commonly-accepted tool of critical analysis, which is another unique feature of feminist/ecofeminist thought, and which challenges the traditional academic assumption of unqualified objectivity.\textsuperscript{37} In the case of this thesis, the subjective experience of women IVF-users will provide a contrast to the supposed objectivity of the science and technology of infertility/IVF.\textsuperscript{38} I have also presupposed the basic presence of patriarchy, to varying degrees, in all aspects of Western society; in relation to this thesis, some of the most important sites of patriarchal experience include the medical care of women (see note 5 above regarding “medicalization”), environmental degradation, and the general exclusion of women from positions of influence and leadership in all the world’s major religions. That being said, it is not the intention of this thesis to challenge or otherwise debate the current Roman Catholic magisterial teaching on IVF, which rests on the belief in the inseparability of the procreative and unitive aspects of sex, which IVF purportedly divides. It will be my goal, however, to demonstrate how the basic principles of ecofeminism do find support in other areas of Roman Catholic Tradition (e.g., teaching on the dignity of women and the sanctity of Creation). Therefore, the Church prohibition of IVF can be supported from these


\textsuperscript{37} Personal experience is also a feature of liberation methodologies, e.g., Ivone Gebara, \textit{Longing for Running Water: Ecofeminism and Liberation} (Minneapolis, MN: Fortress Press, 1999).

\textsuperscript{38} It is important to note that: a) a focus on particular women’s experiences should not be mistaken as universal human or women’s experience; and b) feminist theory generally strives to strike a balance between subjective experience and objective fact. However, feminist critique, as in phenomenology, claims that subjects always observe and make sense of their findings within a particular context and with a particular history, which invariably informs what is observed and understood. Thus, feminists tend to assume bias and subjectivity as the rule, rather than the exception, as opposed to other academic disciplines, such as the natural sciences, which tend to assume the objectivity of the researcher. See note 50 below.
alternative ecofeminist sources in tandem with (but also quite apart from) the procreative-unitive argument.

The intrinsic connection among Scripture, Tradition and ecofeminism is well established and articulated by such influential theologians as Ivone Gebara, Rosemary Radford Ruether and Elizabeth A. Johnson, thus I have applied their ecofeminist theological method here to the issue of *in vitro* fertilization rather than duplicate their research on these connections.

*Ecofeminist Methodology*

The primary hermeneutical lens for feminists is a deep suspicion of patriarchy. Since the voices of women have been historically absent in patriarchal societies, feminists work to overturn pervasive and unjust male biases in all aspects of societal life, including law, politics, economics and religion, and to reconstruct these structures in ways that are more positive for women (and ultimately, also for men). In ecofeminism, the critique of patriarchy is extended to the other-than-human world, so that anthropocentric biases are uncovered and replaced alongside androcentric ones; this critique is based on the belief that the “patriarchal culture of the terror of nature and the terror of the elemental power of the female” are dynamically and intrinsically intertwined.\(^{39}\)

One of the most important sources for this deconstructive and reconstructive process is personal, bodily experience, particularly “experiences of women’s suffering and desire for wholeness.”\(^{40}\) While, in fact, all human knowledge stems from personal bodily experience in

---

\(^{39}\) The evocative language of terror employed here by Spretnak has become a landmark work of ecofeminist thought, helping to establish the foundational principles of ecofeminism upon which authors today continue to build. This work is still widely referenced today. Charlene Spretnak, “Ecofeminism: Our Roots and Flowering,” in Diamond and Orenstein, *Reweaving the World*, 6.

\(^{40}\) Cahill, *Genetics, Ethics and Feminist Theology*, 60.
some form or other, the uniqueness of feminist reflection is the explicit use of women’s experience, as opposed to traditional scientific or religious thought, for example, which has masked specifically male experiences as universal, objective human experiences. As such, feminists recognize the importance of context as the particular set of historical, biological, political and social factors that account for the differences in experiences between men and women, and between people generally. Pluralism, therefore, is an important value for feminists, who wish to promote a methodological bias for women without making claims for the universality or uniformity of women’s experiences and contexts. This is reflected in the wide range of sources utilized by ecofeminists, including the voices of women and minorities, and the natural and social sciences—especially ecological science and feminist theory—and in the diverse applications of these methodological principles.

In Christian ecofeminist theology, the methodological principles of ecofeminism are also informed by women’s readings of Scripture. Some of the important biblical passages and themes that inform Christian ecofeminists’ belief in the fundamental equality of women and men and the intrinsic goodness of all Creation include: the Genesis creation narratives and the concept of the *imago Dei*; the Exodus event and prophetic tradition of justice and liberation; and the Incarnation and the Jesus-Sophia tradition. Ecofeminist theologians, however, recognize that the scriptural witness about women and Creation is sometimes conflicted, reflecting the patriarchal biases of

---


43 Farley, *Feminist Theology and Bioethics*, 166, 175.

44 For an example of the wide variety of (eco)feminisms that exist, see: Carolyn Merchant, “Ecofeminism and Feminist Theory,” in Diamond and Orenstein, *Reweaving the World*, 100-05.

many of the biblical authors, as well as some Church authorities (primarily male clerics, protectors of “orthodoxy”) who have claimed sole powers of biblical interpretation.\footnote{Explaining the development of orthodoxy and the canon of Scripture, Ruether notes: “Scripture and tradition, are themselves codified collective human experience.” Yet, “classical theology, including its codified traditions, [is] based on male experience rather than on universal human experience.” (emphasis original) Similarly, O’Neill writes: “Then, having learned the Catholic tradition, women gained the confidence to interpret it through our own experience, trying as we did so to right the imbalances brought about by an all-male tradition.” See her work also for examples of negative beliefs about women and Creation that have at times been espoused by the Roman Catholic Church as well as other Christian denominations. See: Ruether, Sexism and God-Talk, 12-13; O'Neill, Creation and Anthropology, 292.} Thus, ecofeminist theologians employ the tools of context and personal experience to uncover the ways in which issues beyond our immediate theological boundaries (e.g., gender, class, and race) have influenced these patriarchal biases, and how the Church has sometimes been blind to these realities. For Catholic ecofeminists, this critical methodology is equally applied to the Church Tradition, including magisterial teaching.\footnote{For some formerly Catholic and formerly Protestant feminists, a critical analysis of Christian teaching has led to the conclusion that Christianity is irredeemably patriarchal, and they now self-identify as post-Christian (e.g., Daphne Hampson, Carol Christ, Mary Daly, who writes: “If the [Christ] symbol can be “used” that way [oppressively] and in fact has a long history of being “used” that way, isn’t this an indication of some inherent deficiency in the symbol itself?”). Of course, many other feminist theologians have not espoused such a wholesale rejection of Christianity, and this has not been my own experience; thus, I situate the following analysis of IVF within my personal context of Western Roman Catholicism. See: Daphne Hampson, Theology and Feminism (Cambridge, MA: Basil Blackwell, 1990); Mary Daly, Beyond God the Father: Toward a Philosophy of Women’s Liberation (Boston: Beacon Press, 1985), 72.} Other important sources for Christian ecofeminist theology include other-denominational and supposedly unorthodox or heretical views, as well as religious and spiritual traditions outside the Judeo-Christian heritage (in addition to the natural and social sciences, as described above).\footnote{See note 47 above, and, e.g., Teresia Hinga, “The Gikuyu Theology of Land and Environmental Justice,” in Women Healing Earth: Third World Women on Ecology, Feminism, and Religion, ed. Rosemary Radford Ruether (Maryknoll, NY: Orbis Books, 1996), 172-84; Vandana Shiva, “Let Us Survive: Women, Ecology and Development,” in Women Healing Earth: Third World Women on Ecology, Feminism, and Religion, ed. Rosemary Radford Ruether (Maryknoll, NY: Orbis Books, 1996), 65-73; Judith Plaskow, “Feminist Judaism and Repair of the World,” in Ecofeminism and the Sacred, ed. Carol J. Adams (New York: Continuum, 1993), 70-83; Paula Gunn Allen, “The Woman I Love is a Planet; the Planet I Love is a Tree,” in Diamond and Orenstein, Reweaving the World, 52-57; Carol P. Christ, “Rethinking Theology and Nature,” in Diamond and Orenstein, Reweaving the World, 58-69; Starhawk, “Power, Authority, and Mystery: Ecofeminism and Earth-Based Spirituality,” in Diamond and Orenstein, Reweaving the World, 73-86.}
Informed, therefore, by a deep suspicion of patriarchy and a fundamental belief in the goodness and interconnection of all Creation, ecofeminists tend to value community, holism, justice, and diversity and pluralism. These values challenge the “logic of domination” inherent in patriarchy, and the supposed objectivity of (primarily male-oriented) science and theology. As a result, an ecofeminist ethic must not only oppose harm to women and the other-than-human environment, but also actively promote relationships of justice and respect among women, between women and men, and between all people and other-than-human Nature. This “ethic of care” does not primarily depend on an individualistic rights approach such as the Natural Law-based magisterial method, which is largely concerned with defending the rights of fetuses and responsibilities of spouses. While often helpful in simplifying ethical issues and identifying their most crucial components, this approach may also lose sight of how certain moral problems play out in real life by failing to recognize that “all humans do not have equal choice and agency.” Other traditional ethical frameworks may also be inadequate to study IVF: a Kantian ethics of duty, for example, is based on universalizable moral judgements which do not recognize differences in women’s individual contexts; utilitarianism may not take account of who determines the social utility of IVF treatments and how utility calculations are made, and women’s rights may be sacrificed for “the greater good.”


50 There is a long history of feminist criticism of the objectivity of science, e.g., in terms of bias at the levels of experimental design, interpretation of data, and funding decisions, as well as the underlying philosophy of science, which is highly metaphorical and originally based (e.g., Francis Bacon, the “father” of modern science) on a philosophy of dominating and enslaving female-identified “Nature.” See especially Shiva, *Let Us Survive*, 65-69; David Kinsley, *Ecology & Religion: Ecological Spirituality in Cross-Cultural Perspective* (Englewood Cliffs, NJ: Prentice Hall, 1995), 204; Sallie McFague, *The Body of God: An Ecological Theology* (Minneapolis: Augsburg Fortress, 1993), 91-96; Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: Harper & Row, 1980).

51 *Dignitas personae*, e.g., 4, 6, 12, 14, 19; *Donum vitae*, e.g., 4, 5, I.1, I.2, I.6, II.A.1, II.A.2.

52 Stoyle, *For Now we See through in vitro Darkly*, 215.

ethics based on the experiences of their own bodies, with all of its accumulated history, wisdom and longings.... And because ethical decisions will be made based on one’s own experience, they will be contextualized, pluralistic and respectful of diversity.” As Catherine Norris notes, this approach can risk overly relativizing ethical issues and avoiding concrete judgements; however, she believes that in reality, “most feminists navigate the murky waters between relativism and absolutism artfully,” unwaveringly promoting relationships of mutual respect and justice, while allowing that the real-life actualization of these relationships may take many different forms.

This thesis, therefore, will employ the bioethical model of Farley, as described above, adding a specifically ecological concern to her feminist ones. The morality of IVF, then—at the medical as well as political and cultural levels—will be assessed according to the values of equality, mutuality, autonomy and relationality, in keeping with (eco)feminist understandings of embodiment, norms for relationships and the common good. The methodology and conclusions of this thesis will be informed by my own context as a white, Western, Roman Catholic woman; women from different cultural and religious backgrounds (and, indeed, other white, Western, Roman Catholic women) will necessarily bring different experiences to the discussion of IVF, and may reach different conclusions on its moral permissibility.

Procedure

The thesis paper will be comprised of an introduction, four chapters, and a conclusion. The Introduction will delineate the thesis statement and provide the general context for the research question. Some of the most important academic research in this area will be broadly

54 Mary Judith Ress, “‘Remembering Who We Are’: Reflections on Latin American Ecofeminist Theology,” Feminist Theology 16, no. 3 (2008), 394.


56 Farley, Feminist Theology and Bioethics, 176, 179.
presented, and remaining questions identified. Next, through a discussion of the methodology to be used in the thesis, the foundations of ecofeminist theology will be reviewed, and the ethical criteria to be used will be developed. This will include a discussion of the particular strengths and weaknesses of an ecofeminist ethic, and how this compares to other ethical models. The procedure will be outlined and the thesis chapters described. The Introduction will conclude with a discussion of some of the implications of this work.

Chapter 1 (Medical Aspects of IVF) will consist of a detailed discussion of the medical aspects of IVF. Special attention will be paid to the treatment of women during the procedure, as well as the health risks and benefits they encounter during and after treatments. There will also be a discussion of the lack of reliable data about IVF use and success rates, due in large part to highly variable regulating and reporting requirements for IVF clinics around the world. The data which is beginning to appear in the literature is primarily from the United States, Canada, Britain and Israel, thus the thesis will focus primarily on the experience of IVF in these countries.

In Chapter 2 (IVF Controversies), I will explore some of the major controversies associated with IVF. In addition to the medical risks outlined above, I will discuss some of the political and economic problems associated with IVF, as well as some of the religious responses to IVF. Roman Catholicism will be the primary theological tradition of interest, however, other Christian denominations will also be briefly considered to provide a broader theological picture against which to compare the unique contributions of ecofeminist thought. As noted in the Method section, some feminists have found Christianity to be incompatible with the basic tenets of feminism (that is, they have found it to be irredeemably patriarchal).

My use of Roman Catholic doctrine, then, represents a point of disagreement with these authors on the fundamental

57 See note 48 above.
nature of Christianity, and is reflective of my own experience as a Catholic woman, as well as the continuing importance of the basic Christian story for Western societies.58

Chapter 3 (Ecofeminism and IVF) will describe ecofeminist ethical principles and explore how these principles have been applied to certain bioethical problems. A feminist analysis of IVF will follow, including an examination of ecofeminist principles in defence of IVF. The chapter will conclude with an ecofeminist critique of IVF, exploring in particular the ways in which IVF: masks the important environmental factors that may contribute to infertility; contributes to the overconsumption of limited resources; pollutes ecosystems and women’s bodies; and compartmentalizes and commodifies women’s bodies in connection with patriarchal assumptions about women and the other-than-human.

In Chapter 4 (Ethical and Theological Implications), I will defend the thesis statement by demonstrating that IVF is ethically and theologically problematic because of the way that IVF promotes divisive and hierarchical dualisms between men and women, and between humans and the other-than-human, which devalue women’s bodies and physical Creation, and which, in turn, contradict the all-inclusive goodness of Creation implied by Christ’s Incarnation. I will explore how an ecofeminist analysis both lends support to and challenges the Roman Catholic Church’s teaching on IVF, and elucidate some of the important implications of this research.

The Conclusion will review the main arguments and conclusions of the thesis paper, and identify some possible avenues for further research.

58 I draw here especially on Rosemary Radford Ruether, who affirms the “usable tradition” of liberation of the oppressed, prominent in the Hebrew and Christian scriptures, but who also notes the ambiguous nature of all religious, philosophical and political traditions. Ruether, Sexism and God-Talk, 21-22.
Implications

The findings of this thesis lend support to the magisterial teaching prohibiting the use of IVF. However, by focusing on the implications of IVF for women and the other-than-human environment—as opposed to the Magisterium’s almost unique concern for the embryo—this thesis also presents a challenge to the Church to integrate its bioethical teaching more fully with its belief in the God-given dignity of women and all Creation. Furthermore, the ecofeminist ethic employed offers an alternative to the legalistic rights-based approach historically favoured by the Church, and encourages bioethicists—as well as medical practitioners, policy-makers, and consumers—to pay attention to the specific contexts in which IVF and all ethical issues occur. Secular ecofeminist analyses of IVF can also benefit from a theological perspective since the moral considerability of women and other-than-human nature may otherwise prove to be ultimately groundless.

59 E.g., Stoyle notes that in Donum Vitae, words or phrases denoting the embryo or fetus appear more than 85 times, while words denoting woman appear only 39 times, nearly half of which refer to the couple. She argues that the document almost completely fails to consider the woman as an individual moral agent, even though the process of IVF occurs within her body. The document also lacks any consideration of the ecological effects of IVF. Similarly, another Vatican document on ARTs, the Pontifical Academy for Life’s 10th General Assembly Final Communiqué on “The Dignity of Human Procreation and Reproductive Technologies” (not reviewed by Stoyle) does not mention the woman as an individual even once in the seven-page document. Stoyle, For Now We See through in Vitro Darkly, 219; Pontifical Academy for Life, “Final Communiqué,” in The Dignity of Human Procreation and the Reproductive Technologies: Anthropological and Ethical Aspects: Proceedings of the Tenth Assembly of the Pontifical Academy for Life (Vatican City, 20-22 February 2004), ed. Juan de Dios Vial Correa, Elio Sgreccia, and Pontificia Academia pro vita. (Vatican City: Libreria editrice Vaticana, 2005), 11-17.

60 Stoyle, For Now We See through in Vitro Darkly, 214, 219.

61 Burns, Warren’s Ecofeminist Ethics, 116.
Chapter 1

Medical Aspects of IVF\textsuperscript{62}

Medical Procedure

\textit{In vitro} fertilization (IVF) is a reproductive technology that enables human eggs to be fertilized by human sperm in a laboratory and subsequently transferred to a woman’s uterus or fallopian tubes for gestation and eventual birth.\textsuperscript{63} Because many steps are involved in the harvesting, fertilization, and transfer of gametes and embryos, IVF and other ARTs are actually a series of varied medical procedures, rather than a single, monolithic process.\textsuperscript{64}

An IVF cycle starts when a woman either begins taking drugs to stimulate egg production (stimulated or standard cycle), or begins ovarian monitoring with the intent of transferring embryos (unstimulated or “natural” cycle).\textsuperscript{65} In a standard cycle, the timing of ovulation is controlled precisely through a process known as “controlled ovarian hyperstimulation,” which is typically induced through a weeks-long course of fertility medications including gonadotropins, progesterone and possible antibiotics.\textsuperscript{66} During this time, vaginal ultrasounds and blood tests are

\textsuperscript{62} The focus of Chapter 1 is simply to describe the medical procedure of \textit{in vitro} fertilization. Ethical evaluations of the procedure will follow in subsequent chapters.

\textsuperscript{63} The term \textit{in vitro} literally means “in glass,” referring to the glass Petri dish (rather than test tubes, as the common term “test-tube baby” suggests) in which egg and sperm are mixed, as opposed to \textit{in vivo} (“in living”), referring to fertilization that occurs inside the body. See: American Society for Reproductive Medicine, \textit{Assisted Reproductive Technologies: A Guide for Patients} (Birmingham AL, 2011): 4; Feinberg, \textit{A Baby at any Cost}, 144.


\textsuperscript{66} Clomiphene citrate was originally the preferred protocol for IVF treatment until the development of gonadotropin-regulating hormone (GnRH) analogues and the emergence of concerns over clomiphene citrate’s
used to evaluate the ovarian response to medical stimulation. If the woman’s ovaries have not responded positively or she becomes ill, the cycle may be cancelled and the patient may or may not choose to continue with further treatment.\(^67\)


to another patient or cryopreserved for future use. Finally, one or more embryos are transferred to the uterus via catheter.\textsuperscript{68}

After transfer, it is hoped that the embryo will implant in the uterine wall, resulting in a pregnancy and the live birth of a child. In 2010, the Canadian per-cycle pregnancy and live birth rates were 34.9\% and 27.2\%, respectively, for women using their own eggs, and 49.8\% and 39.9\%, respectively, for women using donor oocytes, with comparable rates in the US.\textsuperscript{69} A woman may therefore need to undergo several IVF cycles before giving birth to a live baby. In order to reduce the need for multiple cycles, more than one embryo is often transferred at a time, although single embryo transfer is now advocated by many medical associations and mandated by law in certain jurisdictions, in order to reduce the costs and adverse health outcomes associated with multiple births.\textsuperscript{70} Another strategy for reducing the incidence of multiple births

\begin{flushleft}
\textsuperscript{68} In rare cases, the embryo is transferred to the fallopian tubes at the zygote, rather than blastocyst, stage in a procedure called zygote intrafallopian transfer (ZIFT). A related, but also rare, procedure is gamete intrafallopian transfer (GIFT), where gametes are transferred to the fallopian tubes before fertilization. Both procedures are very similar to standard IVF, thus many of the concerns with IVF discussed in this thesis are equally applicable to ZIFT and GIFT. American Society for Reproductive Medicine, ARTs: A Guide for Patients, 7-13; Centers for Disease Control and Prevention, 2010 ART National Summary Report, 73.

\textsuperscript{69} Joanne Gunby, Assisted Reproductive Technologies (ART) in Canada: 2010 Results from the Canadian ART Register (Montréal: IVF Directors Group of the Canadian Fertility and Andrology Society), 1.

\end{flushleft}
from IVF is multifetal reduction, where one or more fetuses are aborted in order to mitigate potential problems before they arise.\textsuperscript{71}

To summarize, a standard IVF cycle involves at least four different steps: ovulation stimulation; gamete retrieval; exogenous fertilization; and embryo transfer. Cycles that are unstimulated or use frozen gametes or embryos are less costly and invasive because ovulation stimulation is precluded, and in the case of frozen gametes or embryos, gamete retrieval is also avoided (although in all cases hormonal treatments are still required to prepare the uterus and cervix for pregnancy). In many cases, the various treatments are divided among several adults, so that the resulting child may have up to three biological parents (egg and sperm donors, and gestational carrier) in addition to one or two intended social parents. In these cases, IVF cycles must be started concurrently for two women—both the egg donor and gestational carrier—so that the carrier’s uterus will be prepared to receive the embryo shortly after egg removal.

**Women and IVF**

Because of the inherent nature of IVF treatments, women are the primary consumers of this medical technology; they receive the bulk of treatments compared to their male counterparts, and the treatments they receive are medically more invasive, risky, and prolonged than men’s. However, IVF is typically pursued as an infertility treatment for couples, which makes it rather unlike other medical procedures: in this context, the infertility which IVF seeks to alleviate is not necessarily the physiological pathology of an individual, but the particular inability to conceive of two individuals as a couple. As Simone Bateman notes, the concept of “infertility treatment” is defined by a peculiar mix of social and medical criteria, and has been constructed around and

\textsuperscript{71} In 2010, the multiple birth rates in Canada and the US were, respectively, 22.8% and 30.3% of live births from IVF, compared to approximately 3% in the general population. See: Centers for Disease Control and Prevention, 2010 ART National Summary Report, 15; Gunby, 2010 Canadian ART Register, 4.
supports the founding of the conventional or “natural” family—that is, married or stable, monogamous heterosexual partners and their own children. Estimates of the world prevalence of infertility vary widely, and are cited as anywhere between a global average of 1.5% primary female infertility (inability to conceive one child), to as high as 30% secondary infertility (inability to conceive subsequent children) in parts of sub-Saharan Africa. The current rate of infertility in Canada is estimated to be between 12 and 16%, and is thought to be increasing.

Early reports speculated that IVF was only clinically indicated for approximately 5% of all infertile couples, although today it is often indicated as a first-line fertility treatment for nearly all infertility diagnoses. However, rapid technological advances in treatment for multiple possibilities for participation (as egg donor, surrogate, commissioning party and intended social parent, or a combination of these roles) have meant that IVF is now open to

---


76 In 1993, the Canadian government’s Royal Commission on New Reproductive Technologies found that fallopian tube blockage was the only medical diagnosis for which IVF had proven to be effective, and it recommended that public funding of IVF be limited to this indication. This recommendation was the basis for the government of Ontario’s delisting of IVF as a publicly-funded medical procedure in 1994, except for completely blocked fallopian tubes. In 2009, however, Nisker argued that IVF was actually medically indicated for such varied conditions as oocyte depletion (including both “cancer survivors and women over 35”), scarred fallopian tubes, endometriosis and inadequate sperm. He argues for the public funding of IVF, since this would discourage women from first seeking less invasive and costly gonadotropin fertility drugs that carry a high risk of multiple-order births, which, in turn, are associated with poorer health outcomes and higher healthcare costs than singleton births. See: *Royal Commission on New Reproductive Technologies, Proceed with Care*, 526; Nisker, *Socially Based Discrimination*, 764.
women from a wide variety of backgrounds and lifestyles who seek it for equally varied motivations, including: women suffering from infertility themselves or the infertility of a partner; single women without partners or lesbians without male partners (and, by extension, gay men via female donors and surrogates); post-menopausal women past the normal child-bearing age; widowed women with embryos or their husband’s sperm in storage; women who volunteer eggs and/or surrogacy services altruistically for a stranger or loved one; or women who sell eggs and/or surrogacy services as a means of earning an income. However, the common practice of evaluating IVF efficacy according to infertility diagnosis means that people who are socially, rather than biologically, unable to reproduce are not well represented in the medical literature.

As Franklin has noted, people seek out IVF not only to treat a perceived biological dysfunction, but also to “repair a missing social role.” Patients admit pursuing IVF in order to assure themselves of having tried all possible avenues for treatment or because of peer-pressure and the demands of extended family members, for example. Consequently, women’s experiences of IVF are extremely diverse and often mixed. Studies from Portugal and Israel found that shame and emotional pain are prominent themes for women undergoing treatment, and that these feelings are exacerbated by uncertainties surrounding the causes of failed treatments, or by incomplete or misleading information about IVF. Although most women do

---

77 See note 18 above.
78 E.g., in the Canadian ART Register results, only infertility is identified as a reason for IVF treatment; the US ART National Summary Report includes categories for “Other” and “Unknown,” although these also refer specifically to infertility of unusual or unknown cause. See: Gunby, 2010 Canadian ART Register, 13; Centers for Disease Control and Prevention, 2010 ART National Summary Report, 4, 23.
80 Ibid.
seem to cope successfully with the psychological stresses of IVF, one study reports that nearly 30% of couples eventually stop treatment due to psychological distress, and many women continue to experience severe anxiety or depression for several months following the last unsuccessful treatment.\textsuperscript{82} Women undergoing IVF are also at risk of developing certain medical complications, including bleeding, infection, damage to surrounding organs during egg retrieval, or, very rarely, death.\textsuperscript{83} Medically effective alternatives to IVF are becoming available,\textsuperscript{84} although it is unclear whether patients are fully informed of such alternatives before commencing treatment.\textsuperscript{85}

Even with the attendant risks, many women are highly motivated to continue even painful and expensive treatments for the sake of having a biological child.\textsuperscript{86} In 2010, approximately 7% of US women undergoing IVF had had four or more previous cycles, and 6% of Canadian women had had at least three, suggesting that some women have positive experiences of IVF.\textsuperscript{87} A recent study examining a public dispute in Israel over the extent of IVF funding found that IVF there was framed as a means of alleviating the extreme emotional distress caused by


\textsuperscript{83} See “Pollution of Bodies and Ecosystems” in Chapter 3. See also: American Society for Reproductive Medicine, ARTs: A Guide for Patients, 16-17; Gunby, 2010 Canadian ART Register, 19.

\textsuperscript{84} E.g., one study found that couples treated with NaProTechnology (“natural procreative technology”) infertility protocols had a nearly 70% pregnancy rate within 3 years of treatment, compared with the approximately 45-55% cumulative success rate of IVF. See: Brooke E. Jemelka, David W. Parker, and Renee Mirkes, “NaProTechnology and Conscientious OB/GYN Medicine,” Virtual Mentor 15, no. 3 (2013): 215.

\textsuperscript{85} E.g., Benjamin and Ha’elyon found that women’s only source of information about treatment was from the IVF clinic itself, and that this information was often inconsistent. Silva and Machado note that patients rarely, if ever, question the effectiveness of IVF after a failed cycle, suggesting a complete faith in the technology and a lack of information about possible alternatives. Johnston and Gusmano also note that ovarian stimulation and IVF are commonly used as first-line fertility treatments without recourse first to less invasive methods. See: Benjamin and Ha’elyon, Rewriting Fertilization, 672; Silva and Machado, Uncertainty, Risks and Ethics, 541; Johnston and Gusmano, Why we should all Pay for Fertility Treatment, 18.

\textsuperscript{86} Silva and Machado, Uncertainty, Risks and Ethics, 539.

\textsuperscript{87} Centers for Disease Control and Prevention, 2010 ART National Summary Report, 28; Gunby, 2010 Canadian ART Register, 4.
infertility, and creating alliances between women from traditionally rival ethnic groups. It is likely, therefore, that most women have ambiguous experiences with IVF as both a source of hope for overcoming the pain of infertility, but also as a source of pain in itself due to physically, emotionally and financially demanding treatments and frequently unfulfilled expectations.

**Regulation and Data Collection**

The regulation of *in vitro* fertilization varies widely around the world, and often considerably within the same country. In Canada, IVF and other reproductive technologies are regulated by the “Assisted Human Reproduction Act.” This Act prohibits cloning, the creation of chimeras, and payment for gametes, embryos and surrogacy services; and it establishes a mandate for federal inspectors to verify that clinics are in compliance with the Act (although this latter provision is not currently in force). In the United States, the regulation of IVF is also left to individual states, although national legislation requires all clinics providing ARTs to report their success rate data annually to the Centers for Disease Control and Prevention. In most cases, IVF services are provided through the private reproductive technology industry. However, with legislators largely unable to keep up with the rapid pace of technological development, the industry is often either totally unregulated, or self-policied through voluntary medical and

---


89 *Assisted Human Reproduction Act*, s. 6-7, 46-47. However, a recent constitutional challenge by the province of Québec (*Reference re Assisted Human Reproduction Act*, 2010) has led to the repealing of many portions of the Act, causing the responsibility for standards, licensing and legislation to fall to the provinces and territories, and leaving the federal Assisted Human Reproduction Agency with a reduced and somewhat uncertain mandate. See: Laura Eggerton, “Patchwork Regulations Likely Outcome of Reproductive Technologies Ruling,” *Canadian Medical Association Journal* 183, no. 4 (2011): E215.

90 The situation is similar in the European Union: some member states such as Belgium and Greece have national accreditation standards, but there is no specific EU legislation for reproductive technologies other than the EU Directive on Tissues and Cells, which establishes safety and quality standards for the “donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells,” including gametes and embryos. See: Centers for Disease Control and Prevention, *2010 ART National Summary Report*, 74; *First Invitational International Forum on CBRC; Storrow, Quests for Conception*, 204.
professional associations. Where legislation exists, it is often targeted at single issues, such as laws prohibiting access to reproductive technologies past a certain age. The exception is Costa Rica, which is the only country in the world which has banned IVF altogether. Due to this widespread absence of IVF regulation, issues that are closely related to IVF such as surrogacy and the establishment of legal parenthood for donor-conceived or surrogate-gestated children, also remain inconsistently regulated. For example, the Canadian AHR Act prohibits commercial surrogacy, but does not discuss the validity of surrogacy contracts as such.

Data collection and reporting is often done on a voluntary basis as well. As noted above, American clinics are legally required to report annual IVF success rates. In Canada, however, data submission to the CARTR is voluntary. In the European Union, data are collected by national registries and submitted on a voluntary basis to the European IVF Monitoring Consortium. In addition, ICMART publishes an annual report based on compiled data from around the world. In general, these data indicate increases in the number of reported cycles, the

---

91 This is the case, e.g., in Ecuador, where IVF practitioners and patients have been termed “moral pioneers” as they navigate the rocky terrain of assisted reproduction ethics with essentially no authoritative legal or professional guidance. Elizabeth F. S. Roberts, “God’s Laboratory: Religious Rationalities and Modernity in Ecuadorian in Vitro Fertilization,” *Culture, Medicine and Psychiatry* 30, no. 4 (2006): 521.

92 Storrow, *Quests for Conception*, 303-05.


95 All ART facilities operating in Canada in 2010 voluntarily contributed. See: Gunby, 2010 *Canadian ART Register*, 2, 4.


97 ICMART estimates that data collected for its annual report represents over two-thirds of all assisted reproduction cycles performed worldwide, although ICMART chair Karl Nygren has noted elsewhere the incredible
proportion of IVF cycles using ICSI, and the proportion of single embryo transfers, with a fairly steady live birth rate of approximately 22-27% per cycle.⁹⁸

Treatment costs also vary widely from place to place. On average, the cost of a single cycle of IVF is about $10,000 in Canada and $11,000-$13,000 in the US, although costs may double for women who require higher doses of medication or opt for PGD.⁹⁹ Frequently, additional costs are incurred due to time lost from work as well as travel costs, especially if treatment is sought abroad. Treatment costs in foreign countries also vary widely, although they are generally lower than in Canada or the US, and this is often an incentive for seeking treatment elsewhere, especially when surrogacy is involved.¹⁰⁰

Caution must be used in assessing and comparing the existing statistics, however, as no international standards exist for the collection or reporting of data. Clinic success rates, for example, may be measured in terms of live births per cycle or pregnancies per embryo transfer, and cancelled cycles may or may not be tabulated in the success data. Clinics may also withhold or misreport their data. According to ICMART, many clinics do not report the number of difficulty of collecting complete, accurate and systematic data, e.g., the ICMART global retrospective study elicited responses from less than half the 55 countries approached. International Committee for Monitoring Assisted Reproductive Technologies, ICMART Accomplishments 2008; International Forum on CBRC, 4.


⁹⁹ Johnston and Gusmano, Why We Should All Pay for Fertility Treatment, 18; Birdsall, The “Wild West” of Reproductive Technology, 228; Bouzayen and Eggertson, A Private Matter Becomes Public, 243.

¹⁰⁰ E.g., Gaard cites the story of one American couple who avoided the approximately $70,000 cost of surrogacy in the US by travelling to India, where they paid a relatively meager $12,000 for the same services. Collins calculates that, on average, the mean cost per IVF cycle is about 50% higher in the US than any other country in the world. See: Gaard, Reproductive Technology, or Reproductive Justice?, 110; Eric Blyth, “Fertility Patients’ Experiences of Cross-Border Reproductive Care,” Fertility and Sterility 94, no. 1 (2010): e11-e15; Storrow, Quests for Conception, 302-03; John A. Collins, “An International Survey of the Health Economics of IVF and ICSI,” Human Reproduction Update 8, no. 3 (2002): 269.
initiated cycles, and the US Assisted Reproductive Technology 2010 National Summary Report found significant discrepancies between submitted data and local medical records. In other instances, clinic data may be submitted to a national registry, but not published publicly. Furthermore, combined and summary data may not be reliable because the IVF procedure itself is so varied, and terminology is likely to vary from place to place.

These challenges are exacerbated by the growing trend of CBRC or “fertility tourism,” where patients travel to other jurisdictions for IVF services that are frequently less expensive or more widely and easily available than in the place of residence. Because a physician will rarely have access to the medical records of a patient returning from IVF treatment abroad, and clinics are bound neither by international reporting regulations nor, in many cases, by a requirement to record the patient’s country of origin, these patients—and especially the resulting children—are difficult to track, and are likely underrepresented in national summary data. In fact, concern for privacy is one reason why many couples chose to pursue IVF abroad. Sperm and egg donor data are also difficult to track, although these are becoming more accessible due to increasing concern over the rights of offspring to know their genetic parents.

---

102 Centers for Disease Control and Prevention, 2010 ART National Summary Report, 68.
103 E.g. the Canadian Assisted Reproductive Technologies Register publishes annual reports from data received from all operating clinics in Canada, but does not publish clinic-specific data. Gunby, 2010 Canadian ART Register, 2.
105 Collins and Cook, Cross-Border Reproductive Care, e25-e26.
107 In Canada, donors may choose to remain anonymous or have their information disclosed to future offspring, although, as noted above, Québec’s successful challenge to the AHR Act has presented certain problems.
sheer lack of donor data worldwide—especially when gametes are procured from other
countries—a number of online registries have been created in recent years in order to help donor-
conceived people all over the world connect with their genetic parents and possible siblings.108

Conclusion

*In vitro* fertilization is a medically intensive set of procedures that results in the creation
of a child for persons who either cannot or do not wish to reproduce without assistance. A typical
IVF cycle lasts several weeks and involves many rounds of medication and minor surgical
procedures in order to stimulate ovulation, harvest and fertilize gametes, and transfer embryos. In
Canada and the US, a single cycle of IVF may cost upwards of $10,000 with a usually less than
50% chance of success, meaning that patients often undergo multiple costly cycles before a
successful live birth is realized. Because of the inherent nature of IVF treatments, women are the
primary consumers of this technology, even when it is not medically indicated. Medical risks can
vary from minor discomfort to fatality (rarely). Treatments demand large time and financial
commitments which women often report as psychologically and physically exhausting. At the
same time, many women are highly motivated to continue even very painful treatment for as
long as necessary to have a child.

---

108 There have been anecdotal reports of children conceived from donor gametes who grow up with quite
different physical characteristics from the chosen donor, raising at least theoretical concerns over clinic error, or
even outright duplicity, which makes tracing a child’s genetic heritage a virtually impossible task. Blyth, *Tackling
Issues in CBRC*. 

in developing national IVF standards and registries. See, e.g.: Turkmendag, *Right to Personal Identity*, 58-75; Moira
Kathleen LaBounty, and William Thomas Kennedy, “The Views of Adult Offspring of Sperm Donation: Essential
Feedback for the Development of Ethical Guidelines within the Practice of Assisted Reproductive Technology in the
United States,” *Fertility and Sterility* 93, no. 7 (2010): 2236-46; Steinbock, *A Philosopher Looks at Assisted
Reproduction*, 545; Royal Commission on New Reproductive Technologies, *Proceed with Care*, 428-29, 588.
Regulation and documentation of IVF around the world is largely uncoordinated, which makes it difficult to enforce local laws and collect robust, standardized data about safety and efficacy, especially when medical tourism is involved. As a result, IVF poses many medical, legal and ethical challenges, and since women are the primary consumers of IVF, they are especially at risk. Exploring these risks and challenges will be the focus of the following chapter.
Chapter 2
IVF Controversies

According to Dutch ethicists Dondorp and de Wert, “assisted reproduction is fundamentally a morally sound, not a morally problematic practice.”¹⁰⁹ Contrary to the position of Dondorp and de Wert, however, practitioners, patients, legislators, and religious institutions have identified very real ethical dilemmas that make it clear that ARTs are very much a matter of moral controversy: questions, for instance, of safety and efficacy, funding and accessibility, and social and familial organization. The focus of this chapter will be to explore some of the important medical, legal, economic and sociopolitical controversies associated with in vitro fertilization. Major theological responses to IVF, especially those put forth by the Roman Catholic magisterium, will also be presented and explored, with special attention being given to the methodological emphases of those documents.

Medical Controversies

One of the most important ethical considerations regarding IVF, which Dondorp and de Wert have themselves discussed, is the fact that many innovations in IVF research have entered into clinical practice with little to no preclinical trials, including egg and embryo freezing and ICSI.¹¹⁰ This means that, although IVF has become a largely routine medical procedure, it is also an experimental one, and many technical aspects of the procedure are still poorly

¹⁰⁹ Dondorp, Innovative Reproductive Technologies, 1604.
understood. A reduced or absent testing period means that patients (as well as commercial ART clinics and pharmaceutical companies) can potentially profit from beneficial innovations much more quickly than is usually the case with new medical procedures and products. Others claim, however, that a positive outcome cannot justify what they say amounts to human experimentation on women and their children. Patient interviews reveal that, in fact, the experimental nature of IVF treatments is rarely disclosed, which violates the patient’s autonomy and potentially exposes her to known and unknown harms due to treatment.

Studies on the negative side-effects of IVF have been inconclusive. An important paper by Klein and Rowland in 1989 cited numerous examples of harmful effects linked to clomiphene citrate use, including: ovarian enlargement and rupture of cysts; breast and ovarian cancer; chromosomal abnormalities of egg cells; elevated risk of perinatal death and premature delivery; anatomical anomalies in fetal test organisms; and various reproductive, neural, cardiac and visual

---

111 E.g., Healy et al., Basics of Ovarian Stimulation, 57; F. Olivennes, “Gonadotropin-Releasing Hormone-Antagonist in Human in Vitro Fertilization,” in In Vitro Fertilization, 73; Hananel E. G. Holzer et al., “In Vitro Maturation of Oocytes,” in In Vitro Fertilization, 131; Gardner and Lane, Embryo Culture Systems, 238.

112 I use the term “experimental” to denote the paucity of data on IVF outcomes, the lack of understanding surrounding many technical aspects of the procedure, and the fact that formal preclinical trials have been mostly absent, making patients de facto test subjects. However, the use of this term has been contentious. Ryan notes that if low success rates are an indication of a procedure’s experimental nature, then treatments for terminally ill patients would likewise have to be considered experimental. However, if by “experimental,” one means “not yet [in] customary use,” then it seems that IVF has long ago surpassed the threshold of routine procedure. Feinberg’s criticism of IVF hinges on the fact that even with rising IVF success rates, “it is still an experiment as to whether it will work with any given embryo.” However, by this usage, every single medical intervention—in fact, every human action, in general—must be considered experimental, as risks can never be completely eliminated and successful outcomes cannot always be predicted with certainty. See: Maura A. Ryan, Ethics and Economics of Assisted Reproduction: The Cost of Longing (Washington, D.C.: Georgetown University Press, 2001), 19; Feinberg, A Baby at any Cost and by any Means, 156.

113 In fact, withholding experimental procedures without compelling reasons may be seen as undermining a patient’s autonomy and her right to choose her own medical care. See: Garrison, Regulating Reproduction, 1633.


115 Silva and Machado, Uncertainty, Risks and Ethics, 531-45; Benjamin and Ha’elyon, Rewriting Fertilization, 667-78; Klein and Rowland, Hormonal Cocktails, 341-45.
problems in IVF-conceived fetuses and children. However, none of the authors cited by Klein and Rowland believed that these effects made clomiphene unsafe. For example, Biale et al. and Lunenfeld concluded that still more evidence was needed to establish statistically-significant causal relationships between clomiphene and the purported harms. Laing et al. reported that, “despite the evidence for a direct toxic effect on the maternal retina and the long half-life of closely related compounds, it seems unlikely that clomiphene could have a direct effect on the embryonic eye.” Several researchers have suggested that negative outcomes are the result of underlying fertility problems rather than medical treatment, although few long-term studies exist. Other findings, however, continue to call IVF’s safety into question. For instance, IVF has been linked to an increased risk of major birth defect, low birth weight and cancer for IVF-conceived children, as well as increased risk of pregnancy and delivery complications for women who undergo IVF.

It is also uncertain how effective IVF is compared to other existing fertility treatments. One study reported live-birth rates from Natural Procreative Technology (NPT)\textsuperscript{121} that are comparable to those from IVF. Other researchers, however, have expressed concern about the lengthy observation and treatment periods that may be required from NPT, as well as NPT’s frequent use of hormonal ovulation stimulation, which may increase the risk of multiple pregnancies and their associated negative health outcomes.\textsuperscript{122} Unfortunately, few randomized controlled trials comparing IVF, standard infertility treatment, and/or NPT are available; those that exist differ widely in their conclusions.\textsuperscript{123}

Overall, then, medical debates about IVF are marked by a significant lack of data,\textsuperscript{124} which makes it difficult to weigh the potential benefits of innovative medical procedures against the known and unknown risks to patients and their resultant children.\textsuperscript{125}

\textsuperscript{121} Natural Procreative Technology is a fertility management protocol based on the Creighton Model of fertility tracking, supplemented with hormonal medications as needed, with the goal of “[optimizing] physiologic conditions for natural conception in each menstrual cycle.” See: Joseph B. Stanford, Tracey Parnell A., and Phil C. Boyle, “Outcomes from Treatment of Infertility with Natural Procreative Technology in an Irish General Practice,” \textit{Journal of the American Board of Family Medicine} 21, no. 5 (2008): 375-84.

\textsuperscript{122} Nisker and Johnston and Gusmano argue that patients may be driven to (supposedly) riskier standard fertility protocols over IVF because of differences in cost, further eroding the patient’s autonomy. See: Johnston and Gusmano, \textit{Why We Should All Pay for Fertility Treatment}, 18-21; Nisker, \textit{Socially Based Discrimination}, 764.


\textsuperscript{124} Cohen and Alikani have claimed that over 99% of existing data are essentially unusable because of methodological and methodological bias. Their criticism is based on the contention that transferring fresh embryos immediately after retrieval—as is the case for most IVF treatment cycles, and therefore the majority of all IVF studies—creates “artificial uterine hostility” which accounts for IVF’s high failure rate (i.e., IVF’s low success rate is due to clinical error more than an inherent deficiency in the technology itself). Their proposed solution is to routinely freeze all embryos and transfer them at a later, natural cycle when the uterus is optimally primed to receive them, which would improve success rates and provide more accurate data. See: Jacques Cohen and Mina Alikani, “The Time has Come to Radically Rethink Assisted Reproduction,” \textit{Reproductive BioMedicine Online} 27 (2013): 323.

\textsuperscript{125} Concern for the welfare of potential children raises an especially difficult ethical paradox: when IVF is eschewed for the sake of resultant children, the supposedly protected children never actually benefit from their theoretical parents’ actions since they are never born (the “non-identity problem”). See: John A. Robertson, “Procreative Liberty and Harm to Offspring in Assisted Reproduction,” \textit{American Journal of Law & Medicine} 30 (2004): 7-40.
Legal and Economic Challenges

The lack of regulation of IVF and other ARTs has been likened by some to the infamous “Wild West.” Many authors have expressed concern that poor regulation of these technologies not only compromises their safety, but may also lead to certain abuses—e.g., embryo sex-selection, exploitation of surrogates or the commercialization of gametes. However, the global dynamics of IVF and CBRC mean that even when comprehensive legislation is enacted in one jurisdiction, patients are often able to circumvent it by simply travelling to someplace where the desired procedure is more easily available. Sometimes this may require only travelling to a neighbour state as in the US, where ARTs are variously regulated on a state-by-state basis. This piece-meal legislative dynamic can then influence how laws are drafted internationally; e.g., the British Human Fertilisation and Embryology Act prohibits surrogacy precisely because surrogates are easily available “across the Atlantic.”

Important early US cases have done little to clarify the legal status of the embryo in IVF, and have raised questions about: parentage following donor-IVF; embryonic rights to inherit property or be gestated; unethical creation and disposal of embryos; and whether embryos and gametes ought to fall under property law or family law. Most of these questions remain unresolved. Questions about embryonic sex-selection, foetal reduction, and the disposal

---

126 Birdsall, The “Wild West” of Reproductive Technology, 223-47. See also “Regulation and Data Collection,” Chapter 1.
127 Ibid.; Drabiak et al., Ethics, Law, and Commercial Surrogacy, 300-09; Garrison, Regulating Reproduction, 1623-56.
128 Storrow, Quests for Conception, 305.
129 Ibid., 302; Feinberg, A Baby at any Cost, 143, 148-49.
130 Birdsall, The “Wild West” of Reproductive Technology, 223-47.
of spare embryos after treatment have also raised difficult legal and ethical problems, and have linked IVF to the abortion debate revolving around the legal and moral personhood of embryos and foetuses. Furthermore, it is unclear if patients can legally consent to experimental ART procedures for their own benefit if there is a potential risk to future offspring.

Increasingly, attention has also been paid to the legal rights of donors and surrogates. In general, sperm donors renounce all parental rights and obligations, and the practice has caused relatively little legal difficulty. Egg donation and surrogacy, by contrast, are proving to be much more complicated issues, not least of which is because of the extremely personal and invasive nature of such services and the huge sums of money they command, features that distinguish surrogacy and egg donation from sperm donation. Many jurisdictions have banned commercial surrogacy and the sale of gametes, or have limited the payment permitted for these, partly due to fears about “baby-selling,” as well as to avoid the potential exploitation of poor women who

---

132 E.g., restrictive legislation aimed at protecting embryos was enacted in Italy between 2004 and 2009; paradoxically, however, women began petitioning the Italian court for foetal reductions shortly after the policy was implemented since it increased the likelihood of multiple pregnancy with all its attendant risks. See: Robert D. Nachtigall et al., “What do Patients Want? Expectations and Perceptions of IVF Clinic Information and Support with Respect to Frozen Embryo Disposition,” *Fertility and Sterility* 94, no. 6 (2010): 2069-72.


135 The inherent differences between egg and sperm donation, however, do not always seem to be reflected in law; e.g., Garrison notes that the American National Organ Transplant Act does not consider gametes as “organs” subject to anticommodification policy, presumably because Congress had sperm in mind, which is in great enough supply that market value has never been high enough to warrant regulation. Ova, by contrast, are considerably less plentiful and more difficult to obtain, and thus attract exorbitantly higher prices. (It is also worth noting that, of course, any monetary exchange for gametes or surrogacy is not technically a “donation” but a commercial transaction; see Chapter 3.) Garrison, *Regulating Reproduction*, 1652; Drabiak et al., *Ethics, Law, and Commercial Surrogacy*, 300; Ertman, *What’s Wrong with a Parenthood Market*, 20.


may feel particularly drawn to or coerced into these roles. A study by Drabiak revealed that despite strong cultural rhetoric about surrogacy as an altruistic “vocation” or the “ultimate gift” devoid of financial motivation, including comments from surrogate mothers themselves, women living at the poverty line do, in fact, make up the bulk of commercial surrogates in the United States. Recent scandals in Europe and Asia have also uncovered IVF clinics that specifically target poor women as donors and do not inform them of the health risks of donation.

In addition, there may exist a variety of potential conflicts of interest between a surrogate and the commissioning couple—e.g., if a surrogate decides to engage in behaviour that may pose a risk to the foetus; in this case, it is unclear if a commissioning couple could seek damages from the surrogate, even though in normal cases a pregnant woman’s autonomy is usually protected. A surrogate may also change her mind and wish to keep the child she has borne, or, conversely, the commissioning couple may refuse to accept the child. This may raise questions about who the “real” mother is, but, as Guichon points out, this question is both illogical and unhelpful here since both the woman who provides the egg and the woman who gestates it are biological mothers. Such disputes can become emotionally painful, however, a study of British

---

138 For a study of the problems associated with the exploitation of poor surrogates in India, see: Surrogate Motherhood - Ethical Or Commercial (New Delhi: Centre for Social Research, 2013).

139 Drabiak et al., Ethics, Law, and Commercial Surrogacy, 304-05.


141 Karen A. Bussel, “Adventures in Babysitting: Gestational Surrogate Mother Tort Liability,” Duke Law Journal 41, no. 3 (1991): 661-90. Canadian law would likely protect women from any such litigation. However, this is obviously not the case in all countries, and there are reports of surrogates, e.g., in India, who are forcibly isolated from their own families in order to minimize risks to their pregnancies; thus they are expected to use more caution when gestating the fetus of a client than their own. Reilly, Surrogate Pregnancy, 484; Anu et al., “Surrogacy and Women’s Right to Health in India: Issues and Perspective,” Indian Journal of Public Health 57, no. 2 (2013): 65-70.

142 In the first US case of a surrogate claiming parental rights, the famous “Baby M” case, the court awarded custody to the commissioning couple, but also invalidated the surrogacy contract and granted the surrogate mother visitation rights. See: Stefanie Carsley, “Tort’s Response to Surrogate Motherhood: Providing Surrogates with a Remedy for Breached Agreements,” UBC Law Review 46, no. 1 (2013): 1-32; Waldman, The Parent Trap, 1022.

143 Guichon, The Body, Emotions and Intention, 480.
surrogate mothers found that for the most part, surrogates experience few emotional difficulties in handing over their babies."\(^{144}\)

Nonetheless, a lack of comprehensive IVF regulation can be advantageous for proponents of strong procreative liberty, as it permits medical consumers to choose from a wide variety of services with little impediment. However, Robertson points out that reproductive rights are generally understood as a right to non-interference from the state, not the right to have the state provide the necessary resources to procreate.\(^{145}\) Nonetheless, many public debates about IVF access in Canada and elsewhere—typically centering on the issue of public funding or insurance coverage—specifically invoke the notion of procreative liberty as a positive right that the state must legally and financially support.\(^{146}\) These claims are bolstered by the tendency of some courts to treat infertility as a disability or illness.\(^{147}\)

**Socio-political Implications**

Concerns over IVF’s potential to fundamentally change societal understandings of family and reproduction have continually been expressed with much urgency since the very first

---


\(^{145}\) Robertson, *Procreative Liberty*, 19-20. Conversely, Sperling argues that this interpretation of procreative liberty can actually hinder free access to IVF since clinics and practitioners may then be free to refuse treatment for discriminatory reasons. See also Courtwright and Doron for a general discussion of positive and negative rights to parenthood in the context of IVF, as well as Steinbock, who qualifies Robertson’s position by maintaining that the right to reproduce depends on one’s intention or ability to rear children. See: Sperling, *Male and Female He Created them*, 375-400; Courtwright and Doron, *Restricting Access to ART*, 635-40; Steinbock, *A Philosopher Looks at Assisted Reproduction*, 548.

\(^{146}\) In Canada, this is complicated by the fact that, while provinces are obligated by law to provide “medically necessary” health care, this term has never been clearly defined and the medical necessity of IVF remains in question. See: J. C. Herbert Emery and Ronald Kneebone, “The Challenge of Defining Medicare Coverage in Canada,” *SPP Research Papers* 6, no. 32 (2013): 1-22; Gooldin, *Emotional Rights*, 95; Johnston and Gusmano, *Why we should all Pay for Fertility Treatment*, 19; Nisker, *Socially Based Discrimination*, 764.

successes of IVF. Often these concerns revolve around the well-being of children, as noted above. The sense of commodifying children can be especially acute in IVF, where gametes and embryos are often subjected to multiple quality checks, genetic tests and arbitrary decisions about embryo transfer or foetal reduction—processes which are frequently identified, with much hype, as the engineering of “designer children.” In fact, due to improved diagnostic tests, it is now estimated that 80-90% of pregnancies with Down Syndrome are terminated, and new sperm sorting technologies purport to help parents achieve a pregnancy of the desired sex before fertilization. These realities suggest that a number of parents are increasingly unwilling to accept “just any” child, underlining the changing nature of reproduction from a largely uncontrollable, perhaps supernatural, event to a consciously controlled project.

The unprecedented level of control over reproduction that IVF affords has raised moral dilemmas that previous generations have not had to face: how does one, for example, chose the ideal egg donor, or decide between two healthy embryos for implantation? This explosion of reproductive possibilities has also led to an increase in non-traditional family structures, as previously noted. This, in turn, can challenge traditional social roles and expectations for parents and children. A recent magazine article chronicles the journey of a sperm donor who

---

148 E.g., the Warnock Report and the Proceed with Care Report both identify changing family structures associated with ARTs as areas of significant concern. Department of Health and Social Security, Warnock Report, 20; Royal Commission on New Reproductive Technologies, Proceed with Care, 42-44.


151 Bateman, Changing Conceptions of Reproductive Choice, 321.

152 The famous Nadya Suleman (“Octomom”) case became the focal point of heated public debate, not only over questions of what sorts of ART techniques should be permitted, but also about what type of people should have access to these technologies. Although access to IVF for non-traditional families has increased, it is by no means universal or without controversy. See note 18 above, also: Naomi R. Cahn and Jennifer M. Collins, “Eight is Enough,” Northwestern University Law Review Colloquy 103 (2009): 501-13.
sends his genetic children birthday and Christmas gifts and vacations with their family yearly, admitting, “there’s no societal box to explain this role.” Some critics claim, for example, that children need both a mother and a father, and that opening up IVF to single or homosexual people will lead to children with social and developmental problems (although current research suggests that these claims are unsubstantiated). Rao has argued that ARTs: reveal how families are social constructs rather than biological givens that exist above and apart from the state; commercialize families through the market exchange of reproductive goods and services; and privatize families such that family roles become contingent and based on individual choice.

However, many other aspects of IVF reinforce traditional family structures. Rao again notes how the legal renunciation of donor rights works to reinforce the appearance of a traditional (heterosexual) two-parent family. Indeed, deep social anxiety over donor anonymity and secrecy surrounding children’s origins reveals the extent to which IVF is meant to mimic the “natural,” closed, nuclear family, as patients attempt to have a child “of their own” with someone else’s gametes. This is often the case even in non-traditional settings; e.g., a Spanish research team has pioneered the ROPA (Reception of Oocytes from PArtner) technique that allows both partners in a lesbian couple to participate in the IVF process (one as egg donor,

---


154 Marina et al., Sharing Motherhood, 940; Ethics Committee of the American Society for Reproductive Medicine, Access to Fertility Treatment, 1191-92.


156 Rao, ART and the Threat to the Traditional Family, 958.

157 See note 133 above. See also Franklin for a discussion of IVF’s paradoxical role in both subverting and supporting the importance of biological relatedness in families. Franklin, Conception through a Looking Glass, 747-55.
the other as gestational mother), reinforcing the notion of the normative “natural family” as a stable, monogamous couple and their own biological children.\textsuperscript{158}

Critics have also revealed some unsettling associations between IVF and matters of global justice. Razak explores how IVF reinforces racism, because of its economic inaccessibility for most people of colour, and because of the way that patients chose eggs of different races, revealing how “the eggs of Black women are only valued by other Black people.”\textsuperscript{159} Others worry that cheap reproductive labour in places such as India—where many people lack even basic health services—will lead to exploitative “baby farms” in developing countries for wealthy foreigners.\textsuperscript{160} This is especially controversial given the pressure that is often placed on developing countries, particularly on their women, to limit overpopulation.\textsuperscript{161} Furthermore, these disparities in access to IVF highlight the more basic problem of global health inequalities in general, and issues of just allocation of limited medical resources. CRBC has been proposed as a levelling mechanism to ensure more equitable access to health care services in underserved communities, although others have argued that high demand for reproductive services distorts spending priorities toward profitable medical tourism and away from basic preventative medicine for locals.\textsuperscript{162} Nonetheless, the Warnock Report noted that, while new medical technologies are often prohibitively expensive, there is no way to evaluate and refine the

\textsuperscript{158} Marina et al., \textit{Sharing Motherhood}, 938-41.

\textsuperscript{159} By contrast, people of colour may chose eggs from White women, in recognition that this may bring significant social advantages to their children. See: Arisika Razak, “‘I Am the Darker Sister:’ Responses from Women of Color,” \textit{Journal of Women & Religion} 19, no. 20 (2001): 206-08.

\textsuperscript{160} Anu et al., \textit{Surrogacy and Women’s Right to Health in India}, 65-70.


\textsuperscript{162} Anu et al., \textit{Surrogacy and Women’s Right to Health in India}, 65-70; Ethics Committee of the American Society for Reproductive Medicine, \textit{Cross-Border Reproductive Care}, 3; Storrow, \textit{Quests for Conception}: 324.
technologies and make them more cost-effective without some provision of service.\footnote{Department of Health and Social Security, \textit{Warnock Report}, 5.8.} Singer also argues that, even considering all the potential abuses of IVF, it is not fair to withhold IVF from those who can afford it without likewise withholding all other technologies with such abusive potential.\footnote{Singer, \textit{IVF: The Simple Case}, 546.}

\textbf{Theological Concerns}

all-powerful and omniscient God who alone is the “master of life,” and to whose will humans must submit themselves; the essential sanctity of human life, which God created “in his image” and declared to be “very good”; the special role of humans as “co-creators” and “masters” over the natural world, called to participate in God’s creative work by caring for and even improving upon it; and the importance of monogamous, heterosexual, procreative marriage as the central norm of human sexual expression according to God’s command to “be fruitful and multiply.” These foundational beliefs have raised a number of concerns about IVF, of which Feinberg has outlined some of the most common objections:

- IVF typically involves masturbation, which some Christians find objectionable due to the Biblical injunction against it and the belief in heterosexual marriage as the only licit avenue for sexual expression. However, Feinberg notes that simple alternatives, such as coitus interruptus, retrieval of sperm from the vagina, or the use of a condom for sperm collection, can arguably resolve this problem for some.

- IVF introduces third parties (technicians, donors, surrogates) into a couple’s procreative act, which undermines the reality of procreation as the embodiment of the spouses’ total,

---


168 Gen 1:27, 31.


170 Gen 1:28

171 The use of a perforated condom to collect sperm was introduced as a way of bypassing religious objections to both masturbation and contraceptive use, and there is some debate among Roman Catholic theologians as to whether this technique is permissible for certain assisted insemination procedures (e.g., GIFT). However, since the magisterium considers IVF immoral in all cases, the question of sperm collection for IVF becomes moot. See: Catherine E. Keefe, Renee Mirkes, and Patrick Yeung Jr., “The Evaluation and Treatment of Cervical Factor Infertility: A Medical-Moral Analysis,” *Linacre Quarterly* 79, no. 4 (2012): 418-19, 25; Feinberg, *A Baby at any Cost*, 161; *Donum vitae*, II.B.5.
exclusive, divinely-ordained bond. For this reason, gamete donation and surrogacy have been likened to marital infidelity and are frequently prohibited.\(^{172}\)

- The “artificial” character of IVF may be seen as an attempt by couples to “play God,” or to defy God’s will for that couple to be childless (at least at that point in time). The “unnaturalness” of IVF is also seen as an example of the impingement of technology into family life, and critics worry about the possibilities for the commodification of children, who are traditionally thought of as gifts from God without commercial value.\(^{173}\)

- Concern for the embryo has been a major focus of Christian thought on IVF; commentators have been especially opposed to the routine destruction of embryos for quality-control purposes and the occasional abortion of “excess” foetuses in multiple pregnancies. IVF may also pose particular risks for the resultant embryos, who are obviously unable to consent to risky or experimental procedures. In addition, IVF research is in constant need of raw material—that is, gametes and embryos on which to test the safety and effectiveness of procedures. Experimentation on unfertilized gametes generally poses no ethical problems, but destroying embryos for research, or even creating embryos solely for use in research, is gravely immoral for Christians who accord full moral status to embryos and defend their unqualified right to life.\(^{174}\)

---


\(^{174}\) Zoloth and Henning, *Bioethics and Oncofertility*, 267; Stoyle, *For Now we See through in Vitro Darkly*, 211-13; Feinberg, *A Baby at any Cost*, 156, 166. A closely-related concern is the connection between IVF and stem cell or cloning research, particularly their shared dependence on embryonic test material. Again, Christians who accord full moral status to embryos, or who object to cloning or stem cell research for other reasons, would find these connections objectionable. See: Moira McQueen, “Why Not in Vitro Fertilization?” *Bioethics Matters* 8, no. 1 (2010): 1; Natalia Gerodetti and Véronique Mottier, “Feminism(s) and the Politics of Reproduction,” *Feminist Theory* 10, no. 2 (2009): 149-50; Renate Klein, “From Test-Tube Women to Bodies without Women.” *Women’s
• While IVF helps couples overcome infertility, it is not, strictly speaking, curative.

Although this has not been a major area of Christian focus, it raises questions about the equitable distribution of limited medical resources, the potential right to children and/or medical treatment, and the proper place of medicine and suffering in Christian life.\textsuperscript{175}

These concerns have led some denominations, most notably the Roman Catholic as well as Eastern Orthodox Churches, to reject IVF and most reproductive technologies completely.\textsuperscript{176} The Church of Christ, Scientist also opposes IVF on the grounds of drug use and surgical intervention.\textsuperscript{177} Despite these moral difficulties, however, many Churches have cautiously accepted IVF; typically, these denominations reject the Roman Catholic assertion that the unitive and procreative functions of sex must always be maintained, but share concerns over the exclusivity of marriage and the destruction of embryos. For example, the Church of England states that IVF (without donor gametes) may actually enrich a marriage by providing an opportunity for procreation when it would otherwise be absent due to infertility.\textsuperscript{178} The Church of Scotland likewise states that “IVF raises no moral questions” when used to relieve infertility between married spouses, though it simultaneously raises serious concerns about the standard procedure of ovarian hyperstimulation to produce more eggs than are likely to be transferred to a woman’s uterus.\textsuperscript{179} The Southern Baptist Convention also condones IVF between married spouses, but encourages couples to “adopt” excess embryos, which would otherwise be fated for


\textsuperscript{175} Dignitas personae, 2; Feinberg, \textit{A Baby at any Cost}, 157.

\textsuperscript{176} Schenker, \textit{Women’s Reproductive Health}, 85.

\textsuperscript{177} Ibid.

\textsuperscript{178} Church of England, \textit{Personal Origins}, §111-12.

\textsuperscript{179} Stoyle, \textit{For Now we See through in Vitro Darkly}, 213-14.
destruction, rather than create their own.\textsuperscript{180} Assemblies of God, while not opposed to IVF, are less likely to encourage followers to aggressively pursue treatment as these Churches place a strong emphasis on couples’ prayerful discernment of God’s plan for their lives, which may include a special mission not compatible with raising a family.\textsuperscript{181} Other denominations which generally condone ARTs, including IVF, are Methodist, Lutheran, Mormon, Presbyterian, Episcopal, United Church of Christ, Jehovah’s Witness and Mennonite Churches, provided the utilized gametes belong to married spouses and there is no wastage or deliberate destruction of embryos.\textsuperscript{182} Again, this reveals Christians’ central and common concerns for preserving the exclusivity of marriage between husband and wife, and protecting embryos’ right to life.

\textit{Roman Catholicism}

The Roman Catholic magisterium has been especially vocal in its opposition to IVF, and has produced several documents to support its position, including two major documents addressing ARTs and a variety of other biotechnologies: \textit{Donum vitae} in 1987, and \textit{Dignitas personae} in 2008. There are a number of philosophical and theological features of these documents which distinguish Roman Catholic thinking on IVF from that of other Christian authorities. One of these features is the use of Natural Law. Because Natural Law is discernible by human reason, it is considered to be universal, immutable and timeless. It should not, however, be mistaken for an anti-technology position where, for example, certain medical

\begin{flushright}
\textsuperscript{180} Zoloth and Henning, \textit{Bioethics and Oncofertility}, 267.
\end{flushright}

\begin{flushright}
\textsuperscript{181} As Zoloth notes, this perspective differs from the common perception that childlessness is either a punishment from God, or a sign of selfishness and immaturity. See: Ibid., 266-68.
\end{flushright}

\begin{flushright}
\textsuperscript{182} Schenker, \textit{Women’s Reproductive Health}, 85.
\end{flushright}
procedures are rejected because they are not “natural.” Rather, the “natural” aspect of Natural Law refers more specifically to human nature: this includes the most basic and innate human desires, e.g., desires for knowledge, social life and sexual reproduction, and the application of human reason to pursue these goods. IVF is immoral not because it is “unnatural,” but because the inherent nature of marriage and sex orient these towards building and nurturing families, creating an “inseparable connection, willed by God and unable to be broken by man on his (sic) own initiative, between the two meanings of the conjugal act: the unitive meaning and the procreative meaning.” Thus, just as contraception is wrong because it removes the procreative aspect from the unitive dimension of the conjugal act, so IVF is wrong because it removes the unitive aspect from the procreative, thereby dominating the act of procreation and replacing the conjugal act with impersonal medical procedures.

Another feature of Roman Catholic moral teaching is the appeal to “dignity”; in fact, the opening statement of Dignitas personae reads: “The dignity of a person must be recognized in every human being from conception to natural death.” The dignity and sacredness of human life derive from God, who is the ultimate source of life and who maintains a special relationship with every human person. From this God-given dignity, in turn, flow certain fundamental and inalienable rights: “The human being is to be respected and treated as a person from the moment of conception; and therefore from that same moment his (sic) rights as a person must be

---

183 Donum vitae, 3. Nonetheless, the language employed by the magisterium sometimes contributes to this misunderstanding, e.g., by referring to reproductive technologies as “artificial procreation,” or contraceptives as “artificial birth control” (as opposed to “Natural Family Planning.”) See also, e.g., Paul VI, “Humanae vitae: Encyclical Letter on the Regulation of Birth,” (Rome: Vatican, 1968).


185 Donum vitae, II.B.4.a. See also: Humanae vitae, 12.

186 Donum vitae, I.1, II.B.4, II.B.5; Dignitas personae, 4, 6.

187 Dignitas personae, 1.

188 Donum vitae, 5.
recognized, among which in the first place is the inviolable right of every innocent human being to life.”189 As a result, the Roman Catholic Church is especially concerned with the welfare of embryos created through IVF, and teaches that they may not be deliberately destroyed under any condition.190 Furthermore, human dignity and Natural Law dictate that children have “the right to be conceived, carried in the womb, brought into the world and brought up within marriage,” while parents have the “right to become a father and a mother only through each other.”191 As such, the only licit means of procreation, which preserves the rights and dignity of parents and child, is through the loving sexual act of marriage.192

These two major concerns—preserving the procreative and unitive functions of marriage, and upholding the right to life of embryos—guide the magisterium’s teaching on all other reproductive technologies. Therefore, prenatal genetic diagnosis is immoral if it is done with the intention of aborting an abnormal foetus.193 Likewise, using embryos leftover from IVF treatment for scientific research is considered “a crime against their dignity as human beings.”194 Surrogacy and gamete donation are also out of the question as these violate the exclusivity of marital procreation.195 As alternatives to these practices, the Roman Catholic magisterium has

---

189 Ibid., I.1.
190 Ibid., II.
191 Ibid., II.A.1.
192 Ibid., 5, II.B.4.
193 Ibid., I.2.
194 Ibid., I.4.
195 One possible exception to the prohibition against IVF is embryo donation, where a couple “adopts” an excess embryo from another couple’s treatment, with the aim of carrying the child to term and raising it as their own. The magisterium has not yet spoken decisively on the topic. Another variant on IVF that has gained some acceptance in the Church is GIFT (see note 68 above). This procedure does not involve the creation of an embryo in vitro, however, fertilization is still the result of a third-party medical intervention rather than normal spousal intercourse. See: Zoloth and Henning, Bioethics and Oncofertility, 264-65; Norman M. Ford, “A Catholic Ethical Approach to Human Reproductive Technology,” Ethics, Bioscience and Life 3 (2008): 46; Sarah-Vaughan Brakman and Darlene Fozard Weaver, eds., The Ethics of Embryo Adoption and the Catholic Tradition: Moral Arguments, Economic Reality and Social Analysis, Vol. 95 (Dordrecht, Netherlands: Springer, 2007).
called for more investment and research into the prevention of infertility, and has upheld adoption as a valid solution to childlessness. However, even this has not been without controversy. Many authors object to the implication that only infertile couples should be responsible for caring for orphaned children. Ryan further notes that proposing adoption as a fix-all solution to the problems of infertility and parentless children grossly oversimplifies and obscures all of the social, political and economic factors that contribute to these issues.

It is also worth noting that the Roman Catholic teachings on responsible procreation have been met with a significant degree of disagreement and even dissent from certain clergy, theologians and laypeople. The magisterial insistence on the inseparability of the unitive and procreative aspects of sex in every individual act of conjugation has been a particular point of contention. Many dissenting theologians have criticized the magisterium’s focus on the inherent morality of particular acts (i.e., contraception or IVF). Instead, these dissenting theologians have tended toward personalist and proportionalist approaches that take better account of the intentions of the couple and their particular context. Thus, some have argued that the unitive and procreative aspects of marriage need not necessarily be maintained in every individual act of conjugation, but throughout the marriage as a whole; they conclude, therefore, that there may be a valid place for some forms of contraception or reproductive technologies within loving and responsible Christian marriages. As Ford notes, these conclusions appear to be shared by a

---

196 Dignitas personae, 13.


significant number of lay people; he reports that at least some Roman Catholics avail themselves of IVF, and many of these couples do not show any awareness of their actions being wrong.\footnote{200}

**IVF, Women & the Environment**

For all of the variety found in religious teachings on IVF, the large majority of these traditions employ ethical models that commonly appeal to universalist and abstract principles and doctrines, and give little to no explicit consideration of the role of women in IVF.\footnote{201} Accordingly, the Roman Catholic magisterium states that “the fundamental values connected with the techniques of artificial human procreation are two: the life of the human being called into existence and the special nature of the transmission of human life in marriage.”\footnote{202} And again: “The process of IVF and ET must be judged in itself and cannot borrow its definitive moral quality from the totality of conjugal life of which it becomes part.”\footnote{203} That is, the morality of IVF depends on the technical procedure in relation to the universal Natural Law, and not on the particular people involved, their capacities or motivations, or their individual contexts. This is reflected by the apparently legalistic language employed by *Donum vitae*; for example, an analysis by Stoyle reveals that words denoting legality and rights are used nearly one hundred times in this document alone.\footnote{204} Words denoting the unborn child are used just as frequently, reflecting the overwhelming concern for the right to life of embryos and fetuses.\footnote{205}

\footnote{200} Ford’s comments are corroborated by, e.g., an American study in which nearly one quarter of IVF patients identified as Catholic, and by the popularity of IVF in predominantly Catholic countries. See: Ford, *A Catholic Ethical Approach to Human Reproductive Technology*, 46; Nachtigall et al., *What do Patients Want*, 2070; Sullivan et al., *ICMART World Report 2004*, 1375-90.

\footnote{201} Stoyle, *For Now we See through in Vitro Darkly*, 210-29.

\footnote{202} *Donum vitae*, 4.

\footnote{203} Ibid., II.B.5.

\footnote{204} Stoyle, *For Now We see through in Vitro Darkly*, 219.

\footnote{205} Ibid., 219.
comparison, words for woman appear less than half as often, and nearly half of these are preceded by the male counterpart. Of the few times that words for woman appear alone, “eight refer directly to her body or body parts, six to surrogacy, two to donor involvement, two to prenatal testing, one to abortion and one to consent for post-mortem on an embryo or fetus,” further illustrating that issues of women’s health, political and social disenfranchisement, or reproductive autonomy are peripheral to the Roman Catholic Church’s understanding of IVF. In fact, neither *Donum vitae* nor *Dignitas personae* make any mention of the contextual issues of capitalism, racism, sexism or elitism which feminists have considered central to the question of IVF, nor do they consider the effects of these issues on the health and well-being of women, outside of the potential harm to their marriage.

Feminist theologians, by contrast, have favoured ethical models centered on interpersonal relationships. Margaret Farley has articulated an influential feminist theological ethic based on the values of equality, mutuality, autonomy and relationality. For her, the primary question about IVF must be: “does *in vitro* fertilization violate (or is it in accord with) feminist understandings of embodiment, norms for relationships, and concerns for the common good?” Although Farley’s concerns are similar to those voiced by secular feminist scholars, she notes that feminist theologians do not simply repeat the insights of liberalism or Marxism. Although these may be

---

206 Ibid.

207 Refer to section “Feminist Critique” in Chapter 3.

208 For example, *Donum vitae* frequently refers to the harms of IVF and other reproductive technologies as “contrary to the unity of marriage, to the dignity of the spouses, to the vocation proper to parents,” etc. *Donum vitae*, II.A.2 and throughout.

209 Other critics have also noted how a rights-based perspective inevitably leads to problems of conflicting rights. E.g., Dondorp and de Wert are critical of bans on embryonic research that protect the life of embryos but risk the health of women by preventing studies on the safety of ARTs. They observe, rather harshly, that “Categorical bans are often a doubtful sign of moral one-dimensionality.” See: Dondorp, *Innovative Reproductive Technologies*, 1606-07. See also notes 130 and 131 above.

210 Farley, *Feminist Theology and Bioethics*, 176, 179.
valuable sources of insight, feminist theological work on human relationships goes to the heart of
the central symbols of Christian faith: “To speak theologically means to set human experiences
and concerns against a horizon of ultimacy.”211 Thus, to inquire about the ethical treatment of
women in IVF procedures is to simultaneously ask questions about the sovereignty of God, upon
which human relationships of dominance and submission are modelled; or about God’s relation
to material Creation and the meaning of women’s bodies.212

Even so, IVF is not a topic of major interest for many feminist theologians, and even
fewer have paid notice to the ecological implications of IVF. Two secular exceptions are Greta
Gaard and Laura Corradi, who have each advanced an ecofeminist analysis of IVF which is
suspicious of the choice offered by ARTs and which questions the safety of these procedures for
women’s health.213 One of Gaard’s primary ecological criticisms is in terms of IVF’s effect of
individualizing infertility, which thus masks the environmental causes of infertility such as
industrial pollution.214 Corradi, on the other hand, draws an important ideological connection
between the subjugation of the environment and the subjugation of women’s bodies, which
underlies the philosophical aims of IVF as well as Western science in general.215 Although the
dual subjugation of women and Nature has been well documented by secular and religious
feminists alike,216 to date there has not been a specifically theological ecofeminist response to
IVF. In other words, what is now necessary is to bring together the concerns of religious

211 Cahill, Genetics, Ethics and Feminist Theology, 58.
212 Farley, Feminist Theology and Bioethics, 166-69. This discussion will be continued in Chapter 4.
213 These discussions will be pursued in greater depth in Chapter 3. See: Gaard, Reproductive Technology,
or Reproductive Justice?, 103-29; Corradi, Redefining “Reproductive Rights,” 245-73.
214 Gaard, Reproductive Technology, or Reproductive Justice?, 105.
216 E.g., Howell, Ecofeminism, 231-41; Merchant, Ecofeminism and Feminist Theory, 100-05; Spretnak,
Our Roots and Flowering, 3-14; Ruether, Sexism and God-Talk.
institutions and ecofeminists, and to ground the work of women such as Gaard and Corradi in the Church’s Tradition of Christ’s saving, loving and all-inclusive Incarnation. Such an analysis seeks to base the Roman Catholic Church’s concerns about IVF and other ARTs in the real, lived experience of women and other-than-human Nature, while also providing a sound theological basis for the moral considerability of women and the other-than-human, without which ecofeminist claims may prove to be ultimately groundless. Exploring these interconnections between IVF, ecofeminism and Roman Catholic theology will therefore be the focus of the following chapters.

Chapter 3

Ecofeminism and IVF

One of the basic insights of ecofeminist theory is that the oppression of women and the oppression of other-than-human Nature ultimately stem from the same patriarchal and hierarchical ideologies that legitimate relationships of domination between humans, and between humans and their environment.\(^{218}\) This chapter will describe ecofeminist ethical principles and explore how these principles have been applied to certain bioethical problems. A feminist analysis of IVF will follow, including an examination of ecofeminist principles in defence of IVF. The chapter will conclude with an ecofeminist critique of IVF, exploring in particular the ways in which IVF: politically disenfranchises women and masks the important environmental factors that may contribute to infertility; contributes to the overconsumption of limited resources; pollutes ecosystems and women’s bodies; and compartmentalizes and commodifies women’s bodies in connection with patriarchal assumptions about women and the other-than-human.

**Ecofeminist Bioethics\(^{219}\)**

Informed by a deep suspicion of patriarchy and a fundamental belief in the goodness and interconnection of all Creation, an ecofeminist ethic values community, holism, justice, and


\(^{219}\) Due to length restrictions, it is not possible here to discuss in greater depth the history and development of ecofeminist thought. Refer to the “Method” section in the thesis Introduction. See also: Heather Eaton, *Introducing Ecofeminist Theologies* (New York: T&T Clark International, 2005); Mies and Shiva, *Ecofeminism*; Irene Diamond and Gloria Feman Orenstein, eds., *Reweaving the World: The Emergence of Ecofeminism* (San Francisco: Sierra Club Books, 1990); Merchant, *The Death of Nature*. 55
diversity and pluralism.\textsuperscript{220} These values challenge the “logic of domination”\textsuperscript{221} inherent in patriarchy, and the supposed objectivity of (primarily male-oriented) science and theology. As a result, an ecofeminist ethic must not only oppose harm to women and the other-than-human environment, but also actively promote relationships of justice and respect among women, between women and men, and between all people and other-than-human Nature. Furthermore, because ecofeminism takes seriously the lived experience of women and the material nature of our existence, the concepts of harm, justice and respect must be understood in a way that takes account of women and the other-than-human as embodied subjects\textsuperscript{222}—that is, an ecofeminist ethic promotes holistic well-being, in body and spirit, as well as both individually and collectively.

As such, ecofeminist ethics may be understood as primarily an ethics of care, motivated by the biblical precept of liberation for the oppressed.\textsuperscript{223} According to Burns, caring for a person “requires an understanding not only of the individual’s needs, but also an awareness of the context or social reality in which the individual resides.”\textsuperscript{224} This concept of care is particularly potent for ecofeminist ethics because “by its nature, care is concerned with conditions of vulnerability and inequality”;\textsuperscript{225} it thus allows for an explicit concern for the oppression of women and the other-than-human. Furthermore, care is an inherently relational activity; it is an ethical model, therefore, that takes seriously the interdependence of ethical subjects, and allows


\textsuperscript{221} Burns, \textit{Warren’s Ecofeminist Ethics}, 103.

\textsuperscript{222} Farley, \textit{Feminist Theology and Bioethics}, 176.


\textsuperscript{224} Burns, \textit{Warren’s Ecofeminist Ethics}, 105-06.

for flexibility of ethical responses to particular problems. To ask, then, from an ecofeminist ethic of care, whether IVF or any other medical procedure increases justice and the well-being of women and the other-than-human, one must not only inquire about the technical aspects of the procedure itself, but also about the dynamics of power and vulnerability, about the sorts of relationships facilitated by such procedures, and about the particular care requirements of patients—as expressed by patients themselves—and of the ecosystems in which the procedures are practised.

Consequently, ecofeminist ethics is somewhat of a balancing act, holding in equilibrium the principles of autonomy and relationality, and employing both deontological and teleological methods. Plaskow understands this tension in terms of the Jewish concepts of social justice and obedience to *halakhah* (law) which work together “to connect faith with the concrete world.” Ruether expresses a similar sentiment by appeal to the metaphors of “God” and “Gaia,” representing, respectively, law and communion. Thus, there is a dynamic interaction between the universal (“law”) and the particular (“justice” or “communion”), highlighting not only the possibility, but also the *necessity* for change in an ecofeminist ethical model, in response to changing historical conditions. This change—meaning different ethical possibilities across

---

226 Ibid., 252.
227 According to Widdows, this concern for vulnerable people and the common good is a distinguishing feature of feminist theological ethics; she argues that secular feminists often avoid asserting the importance of the common good for fear of criticising other women’s choices and appearing “anti-choice.” See: Widdows, *The Janus-Face of NRTs*, 98-99.
228 Farley, *Feminist Theology and Bioethics*, 176.
time and space—is a reflection of the fact that there exists no “decontextualized, ahistorical, transcendental vantage point from which humans can make observations … [or] draw conclusions.”\textsuperscript{231} I would add that, in addition to being historical subjects, humans and the other-than-human are also evolutionary subjects, and it is thus essential for our ethical frameworks to be situated within, and reflective of, the ever-changing and infinitely diverse “primary sacred community”\textsuperscript{232} of the cosmos itself.\textsuperscript{233}

This perspective is a challenge to parts of the Roman Catholic tradition that have upheld the possibility of knowing certain theological and moral truths with certainty.\textsuperscript{234} However, ecofeminist theologians have convincingly demonstrated how many of these fundamental Christian truths have been formulated in primarily sexist and anthropomorphic terms.\textsuperscript{235} Allowing ambiguity in moral decision-making, then, is important in creating space for women to wrestle with their own theological and ethical questions—such space affirms women’s capabilities to encounter the divine and discern God’s will for themselves, without the paternalistic mediation of male superiors. Gebara argues that “women’s religious experience and

\textsuperscript{231} Warren, Ecofeminist Philosophy, 152; Burns, Warren’s Ecofeminist Ethics, 104.

\textsuperscript{232} Berry has written extensively on the failure of both religious and scientific establishments to provide “adequate ethical guidance” based on a “functional cosmology.” See: Thomas Berry, “Ethics and Ecology” (Harvard University, Cambridge MA, 9 April, 1996).


\textsuperscript{234} E.g., John Paul II, Encyclical Letter Veritatis splendor (Rome: Vatican, 1993). The pontiff does acknowledge, however, that knowledge of truth is “darkened” by original sin; the primary hermeneutical question for ecofeminists becomes, then: who has the authority to discern Truth in light of “the darkness of error [and] sin”? (Naturally, the magisterium asserts its own exclusive competence here.) See: Vatican Council II, Dei verbum: Dogmatic Constitution on Divine Revelation (Rome, 1965), 10.

\textsuperscript{235} E.g., Christian ecofeminists maintain a belief in God, but criticize the traditional understanding of God as a remote, other-worldly male monarch, which, they argue, is a reflection of cultural beliefs and patriarchal biases that valorize obedience to authority, and that set spirit over body and male over female. See especially the work of McFague, who argues that all language about God—indeed, all human language at all—is necessarily metaphorical and therefore partial and incomplete—and thus also prone, for better or worse, to human bias. See: Sallie McFague, “An Earthly Theological Agenda,” in Adams, Ecofeminism and the Sacred, 90-91; McFague, The Body of God, 91-97.
way of “perceiving” the mystery of life have never been taken seriously by religious or clerical institutions dominated by male power.”

She contends, therefore, that to be a full “ethical subject” is not to reduce ethics to law since all choices have both good and bad consequences, for which a naive and simplistic adherence to formal laws cannot account. For Gebara, real life is a much more complex and nuanced “mélange,” and full ethical subjectivity requires women to take responsibility for their actions and all of the mixed victories, set-backs and risks that that entails.

Ecofeminists, therefore, “call for a new ethics based on the experiences of their own bodies, with all of its accumulated history, wisdom and longings.... And because ethical decisions will be made based on one’s own experience, they will be contextualized, pluralistic and respectful of diversity.”

Not surprisingly, the application of ecofeminist ethical principles to specific medical issues has yielded complex and varied responses. Sometimes this takes the form of simply identifying how women and ecosystems have often been ignored in traditional bioethical discourse—for instance, stem cell debates typically center on the rights of foetuses, without recognition of women’s roles as suppliers of eggs, and without concern for the potential environmental impacts of such research.

Similar criticisms have been made of the abortion debate, for example, by Gebera and Ruether, who argue for abortion’s ethical permissibility in some circumstances. Conversely, Callahan argues that permissive attitudes toward the termination of pregnancies which are not consciously and actively chosen are simply another

---

236 Gebara, An Ethics of Life, 31.
237 Ibid., 33-34.
238 Ress, Remembering Who We Are, 394.
manifestation of the patriarchal devaluing of “irrational” (females) bodies over active (male) minds. Contraception has also been a topic of ecofeminist ethical interest, with authors exploring the various implications of contraceptive use for women’s autonomy and health, racial justice, and ecological sustainability.

An area of particular ecofeminist bioethical interest has been the legacy of dangerous reproductive technologies that has caused many ecofeminists to become suspicious of the long history in Western societies of over-medicalizing and aggressively intervening in women’s health issues, without necessity or evidence of benefit. The uses of the Dalkon Shield, DES and thalidomide are among the best-known examples of medical technologies which entered into routine practice without sufficient evidence of safety or efficacy, and which have subsequently been linked to various cancers, birth defects and fertility problems. Obstetric and gynecological technologies have been particularly criticized, as pregnant and birthing women are routinely subjected to unnecessary interventions such as induction and augmentation of labour, artificial rupture of membranes, episiotomy, analgesic drugs and epidurals, and Caesarean section. This routinization of improperly-tested technologies can be seen as an unethical abuse

---

241 Callahan notes that morality is too often understood as a matter of explicit human agency and decisive action: the mind must dominate the body. In this context, there would be no reason to continue a pregnancy that is not consciously chosen and that represents a sort of undesirable domination by body over the mind. See: Sidney Callahan, “Abortion and the Sexual Agenda: A Case for Pro-Life Feminism,” in On Moral Medicine: Theological Perspectives in Medical Ethics, ed. M. Therese Lysaught et al., 3rd ed. (Grand Rapids, MI: Eerdmans, 2012), 942-43.


243 Gaard, Reproductive Technology, Or Reproductive Justice?, 110-12; Klein and Rowland, Hormonal Cocktails, 62.

of women’s bodies as medical testing grounds, consonant with the Baconian dualism of superior, rational male scientist over the passive and manipulable female patient. These technologies may also engender a problematic distrust of the female body, insofar as they can create unfounded fears about the dangers of childbirth and the need for medical experts to guide, or even force, the pregnant woman’s body into safely delivering the child.\textsuperscript{245} Furthermore, Razak notes how “precautionary” technologies such as prenatal diagnosis inappropriately individualize maternal and neonate health by focusing solely on genetics, even though the majority of birth-associated disabilities are not genetic in origin.\textsuperscript{246} Thus, in addition to stigmatizing the pregnant body by conceptualizing it as a threat to the foetus in need of obstetric control, these technologies may also obscure the important environmental factors that contribute to negative health outcomes.\textsuperscript{247}

In general, then, (eco-)feminists have been suspicious of women’s treatment by medical institutions. They point to the unethical use of women as non-consenting test subjects for new techniques and drugs; overtreatment of clinically-insignificant symptoms, which justify the intrusion of medical experts into women’s health concerns; patronizing attitudes of practitioners that do not take seriously women’s concerns or knowledge of their own bodies; the increasing commercialization of medicine, which commodifies health and creates a conflict of interest between health-care providers and medical corporations motivated by profit; inattentiveness to the ecological causes of disease or effects of treatment; and the individualisation of medical care, which masks social and structural contributors to health, and also conceals trends within the

\textsuperscript{245} E.g., Brubaker and Dillaway, \textit{Re-Examining the Meanings of Childbirth}, 231; King, \textit{Healing the Wounds}, 118-19.

\textsuperscript{246} Razak, \textit{I Am the Darker Sister}, 199.

\textsuperscript{247} Nonetheless, not all women experience birth interventions negatively; not surprisingly, conceptions of medical authority, consent or refusal of treatment, bodily control, and “natural” versus “medical” childbirth, all vary by particular social location. See: Brubaker and Dillaway, \textit{Re-Examining the Meanings of Childbirth}, 217-44.
These tendencies are troubling because they reveal a marked disrespect for the psychological and physical well-being of women, founded on unjust hierarchical dualisms between practitioner and patient. Most troubling of all, however, is the fact that doctors and researchers have often neglected to take responsibility for these harms. For example, Rowland has noted how, in order to mitigate some of the problems associated with pharmaceutical manipulation of the menstrual cycle, some doctors simply prescribe more medicine rather than question the need for pharmaceuticals in the first place.

In response, ecofeminists stress the importance of healthy ecosystems as the primary component of good health. This supports the principles of justice and community, since all humans and other-than-human creatures benefit from a healthy and stable environment. Nonetheless, within the present non-ideal medical system, feminists and ecofeminists have been reluctant to completely condemn any particular procedure, both out of respect for the principles of autonomy and diversity, as well as out of recognition of the genuine need for quality medical care. Thus, particular questions of medical treatment typically defer to the individual, who is encouraged to weigh the principles of justice, respect, autonomy, community, holism and diversity, in light of her own experience and specific context.

---


249 Rowland, Living Laboratories, 54.

250 King, Healing the Wounds, 119-20.

251 E.g., Widdows, The Janus-Face of NRTs, 98-99; Cahill, Genetics, Ethics and Feminist Theology, 62; Diamond, Babies, Heroic Experts, and a Poisoned Earth, 209; Farley, Feminist Theology and Bioethics, 182.


**Feminist Critique**

Feminists have been divided in their analysis of IVF, but in general, two camps can be identified: those who welcome IVF as liberatory for women by offering them more control over the timing and circumstances of their reproductive choices; and those who view IVF with suspicion, skeptical of the quality of choices offered by IVF, choices that may be defined by men and may make it harder for women to not “choose” motherhood.

Individual autonomy and free choice are foundational values of liberal feminism. Liberal feminist analyses of IVF, therefore, tend to welcome the technology, insofar as it: increases women’s reproductive choices, including the choices of when and with whom to reproduce, and which type of children to create; provides them with the fulfilling and meaningful experience of parenthood, oocyte donation or surrogacy; and allows participation in public life (especially in the areas of science and technology, where women have historically been underrepresented) as technicians, physicians, administrators and regulators of IVF. Certain authors have also praised ARTs for their ability to subvert the traditional nuclear family, as well as their potential to release women from the burden of pregnancy, both individually through the use of surrogates, and collectively through possible future ectogenesis. These benefits are considered so valuable to some authors as to constitute a basic reproductive right.

---


256 See, however, the section “Legal and Economic Challenges” above, for a discussion of the right to access IVF. See also: LeMoncheck, *Philosophy, Gender Politics, and IVF*, 162; Singer, *IVF: The Simple Case*, 547; Firestone, *The Dialectic of Sex.*
Despite these benefits, liberal feminists have not been blind to the potential for harm from IVF, such as unfair surrogacy or egg donor arrangements, and various medical risks. Many have not, therefore, embraced IVF unequivocally. Warren notes that,

IVF is at best a small part of a solution to [involuntary infertility]; it can help only a small minority of infertile women, and does nothing to address the underlying social causes which contribute to the problem. Moreover, the publicity surrounding IVF and other [ARTs] may deflect attention and resources from the potentially more important tasks of understanding and counteracting the preventable causes of infertility.257

However, because personal autonomy is a supreme value, she also argues that these concerns alone cannot justify undermining women’s autonomy by restricting access to ARTs.258

Conversely, socialist and radical feminists consider the quality of choices IVF affords women, rather than focus on the number of choices available. Thus, as Widdows explains, IVF does not really increase women’s autonomy because it simply offers another “choice” for motherhood, not a genuinely alternative life option. Although ARTs appear to increase women’s choice superficially by offering nearly unlimited ways of pursuing parenthood, in fact, they can end up reducing autonomy when those choices are so similar as to give the impression of only one “right” choice (motherhood), which can then strongly influence women’s desires for that option.259 It is inappropriate, therefore, to evaluate the morality of IVF based on the concept of choice alone, since strong pronatalist societal pressures can unduly influence women’s

258 Ibid., 39.
259 Widdows’ analysis is based on an economic analogy by Hirschman, where workers’ choices are represented by different flavours of ice-cream: simply offering more varieties of chocolate ice-cream does not really increase or respect my free choice if I would have preferred strawberry. Furthermore, the continual absence of strawberry will probably eventually change my desire to chocolate, since that is all that is ever offered. See: Widdows, *The Janus-Face of NRTs*, 89; Sherwin, *Feminist Ethics and in Vitro Fertilization*, 549; Albert O. Hirschman, *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States* (Cambridge, MA: Harvard University Press, 2003), ix-x.
reproductive preferences; furthermore, when the costs of IVF are prohibitively high, it is clear
that IVF is simply not a viable choice for most women in the world.260

Many ART-critical feminists, therefore, prefer to discuss IVF in terms of power—that is,
who controls IVF technologies, and who benefits from them. When seen as a part of the history
of obstetric medicine and global population control policies, for example, IVF may be
considered as only one in a series of harmful interventions as noted above.261 Likewise, Mies
argues that IVF is simply another form of racist and classist reproductive quality-control that will
intensify inequality and “will mean for most women a loss of confidence in their own bodies and
in their child-bearing competence.”262 Entrusting reproduction to elite medical experts through
the use of IVF, therefore, does not increase equality for women, e.g., who become ill from
treatment; who are pressured, particularly in the Third-World, to reduce or sell their fertility
rather than enhance it; or who forgo treatment altogether in favour of a more conventional or
woman-centered approach.263 Unfortunately, this dynamic can also pit women against each
other, as the IVF-enabled division of motherhood allows rich White women to exploit poor
women of colour for their reproductive labour.264

Furthermore, the usurpation of women’s reproductive capacities through ARTs may be
seen as part of an even broader problem of the sexist philosophical foundations of modern
science. Merchant and Shiva argue that the Baconian scientific method is based on a
dichotomization between objective and subjective, between human and nature, and between man

261 Warren, IVF and Women’s Interests, 42.
262 Mies, NRTs: Sexist and Racist Implications, 175, 186.
263 The derogatory French expression “les enfants banales” (“mundane children”) for commonly-conceived
children, as opposed to IVF-conceived children, is especially telling. See: Ibid., 187.
264 Widdows, The Janus-Face of NRTs, 91.
and woman. This model also sees nature as a passive, fragmented machine which can be poked and prodded—in fact, conquered, subdued and “[shaken] to her foundations” as supposedly-neutral and objective scientific experts see fit. Thus, in IVF, women’s bodies are identified with nature and become passive, fragmented and irrational objects for fertility specialists to “conquer” and “subdue” at will. Although this criticism appears harsh, it is corroborated by the experiences of some women who report feelings of deep alienation and humiliation during IVF procedures.

Feminist theologians have also tended to view IVF and ARTs with suspicion, but without complete condemnation. Farley concludes that IVF may be ethically permissible if it is medically safe, conducive to the child’s development, and meets the criteria of distributive justice. Ryan has similarly argued for the permissibility of IVF from the standpoints of distributive justice, stewardship and the promotion of the common good. Brinkmann, conversely, has demonstrated how women can resist the “ethic of control” proposed by ARTs through the example of medieval infertile women who identified their “defective” bodies with the suffering and “feeding” body of Christ.

---

265 Shiva, *Let Us Survive*, 68.

266 Bacon’s perception of the scientist and his role in uncovering the secrets of nature is, at times, explicitly violent and sexually charged. E.g.: “Neither ought a man to make scruple of entering and penetrating into these holes and corners [the secrets of nature], when the inquisition of truth is his whole object.” Despite the inherent sexism of Bacon’s philosophy, however, Merchant notes that, in other ways, he also contributed to egalitarianism since his inductive methodology established a way for all people to verify the truth for themselves. See: Ibid., 68-90; Merchant, *The Death of Nature*, 80, 164-190.


268 Farley, *Feminist Theology and Bioethics*, 182.

269 Ryan, *The Cost of Longing*.

Feminists, therefore, have been ambivalent about in vitro fertilization. Although the technology brings potential opportunities for women’s enhanced autonomy, the complexities and injustices of the contexts in which IVF is actually practised has caused many women to be sceptical of IVF’s purported benefits.

In Defence of IVF

Although ecofeminists have generally been hostile to in vitro fertilization, certain ecofeminist bioethical principles do offer support to IVF and other ARTs.\textsuperscript{271}

First is a qualified support of medical sciences in general. Certainly, the need for competent and trustworthy persons to promote the health of communities is in keeping with ecofeminist principles of holistic well-being and respect for bodies. Ecofeminist activist Mira Shiva, herself a physician, lists health care as a basic essential of human welfare, even though she is deeply critical of the inappropriate medical care often provided to people in the Global South.\textsuperscript{272} Thus, ecofeminist principles of healthcare support IVF insofar as it aims to overcome infertility as a biological disorder of the reproductive system. However, ecofeminism does not support the idea of pursuing IVF or other fertility treatment at all costs as this may lead to more bodily damage than good, or detract from other important health goals.

\textsuperscript{271} It is worth noting that, although the Roman Catholic magisterium does not condone IVF in any circumstance, it does support, to varying degrees, the bioethical aims discussed in this section, including beliefs about the sacredness of the body and goodness of human health, the dignity of women, and the importance of the common good. See, e.g., \textit{Evangelium vitae}, 47; John Paul II, \textit{Apostolic Letter Mulieris dignitatem on the Dignity and Vocation of Women on the Occasion of the Marian Year} (Rome: Vatican, 1988); \textit{Donum vitae}, 1; Vatican Council II, \textit{Gaudium et spes: Pastoral Constitution on the Church in the Modern World} (Rome, 1965), 26.

\textsuperscript{272} Shiva envisions a system of appropriate medical care as one that values the input of patients (especially women), and that promotes adequate nutrition, equal educational and economic opportunities for women and girls, and a clean and healthy environment. See: Mira Shiva, “Environmental Degradation and Subversion of Health,” \textit{Development Dialogue} 1-2 (1992): 71-90.
A second area of support is the notion of personal autonomy. (Eco)feminists understand this foundational principle to mean respect for women’s right to choose their own medical treatment and to make decisions about their reproductive lives, free from coercion or undue pressure. As Warren notes, this includes the right to take risks or make choices with ambiguous results. Thus, the principle of autonomy dictates that IVF not be restricted simply because of the possibility of personal harm. Rather, IVF can be a means for women to exercise their free choice in making reproductive decisions, so long as social and institutional pressures do not then coerce women into “choosing” treatment they would otherwise prefer not to undergo.

Finally, concern for the common good is another ecofeminist principle that lends tentative support to IVF. The foundation of a communitarian ethic lies in the recognition of the profound interdependence of all Creation. Thus, personal autonomy must be balanced with a concern for the well-being of the entire human and ecological community. Although IVF may conflict with certain community needs, such as a perceived ecological need to limit human population growth, IVF may also benefit communities—e.g., by providing important social status and opportunities for involvement in community life to couples who might otherwise be stigmatized due to their infertility, and by facilitating the birth of children, who enrich communities and carry on the traditions and customs of their respective cultures. This view may also build on certain ecofeminist beliefs about the empowering nature of motherhood. However, most feminists have been wary of too highly extolling the virtues of reproduction, for

---

274 E.g., Gebara, *An Ethics of Life*, 44-45.
276 E.g., Gaard, *Reproductive Technology, Or Reproductive Justice?*, 122-124; Widdows, *The Janus-Face of NRTs*, 78, 84.
fear of promoting pronatalist attitudes which may reduce women solely to their reproductive function.\textsuperscript{277}

\textbf{An Ecofeminist Critique of IVF}

Although ecofeminist ethical principles of equality, mutuality, autonomy and relationality offer a limited support for \textit{in vitro} fertilization, the majority of ecofeminists have been deeply critical of this technology. There are four points in particular at which women’s and environmental concerns intersect problematically in IVF:

a) the medicalization and privatization of reproduction in IVF, which politically disenfranchise women and mask the important environmental factors that may contribute to human and other-than-human infertility;

b) the overconsumption of resources in IVF, which represents a disproportionately large percentage of global healthcare expenditures and contributes to global patterns of mass consumption and consumerism;

c) the use of unsafe techniques and pharmaceuticals, which pollutes both women’s bodies and the other-than-human environment;

d) the compartmentalization and commodification of women’s bodies in IVF, which reflect the same patriarchal values that have contributed to the current environmental crisis.

\textit{Medicalization and Privatization of Reproduction}

IVF is typically portrayed as a strictly medical treatment for the alleviation of some physiological ailment of the reproductive system. Couples are encouraged to seek the advice of a

\textsuperscript{277} E.g., Corradi, \textit{Redefining “Reproductive Rights,”} 256; Sherwin, \textit{Feminist Ethics and in Vitro Fertilization,} 549.
physician and to begin treatment as soon as possible due to the increasingly slim chances of achieving pregnancy with a woman’s advancing age. Infertility, usually defined as the inability to become pregnant within one to two years of regular, uncontracepted intercourse, is thus conceived as an individual health problem, requiring an individual medical solution. Like many other health problems, however, fertility and reproduction are as much social constructions as they are biological ones. This is most evident in the case of single women or homosexual partners who turn to IVF for their “social” rather than “biological” infertility. Furthermore, patients seek IVF for many reasons that are not primarily medical—to achieve a sense of identity or personal fulfillment, for instance, or to appease parental desires for grand-children. How patients understand their own (in)fertility, then, depends in large part on social norms for family-building, gender roles, or pressure from other family members, for example.

IVF is problematic from an ecofeminist perspective, therefore, because it both privatizes and medicalizes a problem that is not exclusively, or even primarily, private or medical. IVF medicalizes infertility because it offers a high-tech, clinical solution to reproductive problems that does not take into account the important social, economic and political forces that motivate people’s reproductive decisions. In the province of Ontario, for example, the appropriate

---

278 The timeframe for deeming the couple infertile may be as short as six months for women over the age of 35 years. See: Franklin, *Conception through a Looking Glass*, 748; Gina Fullam, “Treatment of Unexplained Subfertility in Catholic Health Care: Taking the Lead Toward a Natural Approach,” *Health Care Ethics USA* 21, no. 2 (2013): 6; Mascarenhas et al., *Measuring Infertility*, 2; Gaard, *Reproductive Technology, Or Reproductive Justice?*, 105.


281 Franklin, *Conception through a Looking Glass*, 749.

282 About medicalization, see note 5 above.
indications for IVF only consider medical, rather than social, parameters. Therefore, if a woman seeks IVF treatment out of a desperate desire for motherhood, for instance, IVF may provide her with the desired child(ren), but it will not rectify the social structures which make childless women feel unfulfilled. Likewise, IVF may help a couple honour a religious duty to found a family, but it does not help them to question the validity of a religious tradition that may punitively ascribe “bareness” to personal sin.

IVF also problematically privatizes infertility because treatment is individually-administered and does not address the underlying systematic causes of infertility. Put another way, IVF implicitly lays the blame for infertility on those people seeking treatment, especially women, because it treats infertility as a matter of one’s own genetics and personal health, rather than as part of larger societal problems such as malnutrition, racism or environmental pollution. In India, for example, women’s reproductive problems are linked to nutritional deficiencies due to agricultural changes there. In all parts of the world, women of colour tend to have higher exposure to fertility-reducing environmental and work-related toxins, and are more likely to suffer iatrogenic infertility due to medical abuse. Environmental pollutants, such as bisphenol A, polychlorinated biphenyls and pharmaceutical residues have also been linked to declining fertility in humans. However, the conception of fertility as a private matter of genetics and


284 Shiva, Environmental Degradation, 73-74.


personal health masks these unjust structural contributors to infertility, and thus conceals opportunities to rectify them.

Nonetheless, the medicalization and privatization of infertility in IVF are not wholly bad, and the medicalization of problems previously considered nonmedical can also lead to positive interventions.\footnote{E.g., children with emotional and behavioural problems are better helped by treating them as sick rather than as “bad,” while substance abuse is increasingly being recognized as a matter of public health rather than criminal justice. See: Johnston and Gusmano, \textit{Why We Should All Pay for Fertility Treatment}, 21; Redonna K. Chandler, Bennett W. Fletcher, and Nora D. Volkow, “Treating Drug Abuse and Addiction in the Criminal Justice System: Improving Public Health and Safety,” \textit{Journal of the American Medical Association} 301, no. 2 (2009): 183-90.} The problem of IVF is one of both context and degree. The problem of context is the patriarchal society in which IVF occurs, and that contributes to the incidence of infertility (e.g., through sexist, racist or environmentally-harmful social structures, as noted above), yet insists, often subtly, that a woman’s primary worth comes only from her role as mother.\footnote{E.g., Sherwin, \textit{Feminist Ethics and in Vitro Fertilization}, 549; Janice G. Raymond, \textit{Women as Wombs: Reproductive Technologies and the Battle Over Women’s Freedom} (North Melbourne: Spinifex, 1995), 70-75.} The problem of degree is the extent to which IVF emphasizes individualized, reactive treatment, to the near-total exclusion of broader preventative medicine and the alleviation of oppressive and fertility-harming patriarchal structures. This can be seen by the enormous amounts of money spent on IVF provision and research—an industry valued in the billions of dollars—and by strong political movements in many parliaments to increase IVF access. By comparison, very little research and public health resources are dedicated to preventing infertility in the first place; e.g., the 1994 Cairo Conference recommended a budget of US $17 billion by the year 2000 for “reproductive health” (including contraception, ARTs and population control strategies), but only $5 billion for basic health needs.\footnote{E.g., Marie-Eve Lemoine and Vardit Ravitsky, “Toward a Public-Health Approach to Infertility: The Ethical Dimensions of Infertility Prevention,” \textit{Public Health Ethics} 6, no. 3 (2013): 287-301; Lyerly, \textit{Marking the Environment and its Endocrine-Disruptive Effects on Aquatic Organisms,” Critical Reviews in Toxicology 37} (2007): 607-25.} This myopic focus on individualized, reactive treatment
is also evidenced by the lack of discussion surrounding domestic abuse and ARTs. Few advocates of IVF, for instance, also advocate for an end to domestic violence, even though a major report from the World Health Organization cited marital instability and domestic violence as possible negative effects from infertility and important reasons for increasing access to ARTs.

The implications of this for human health are that women, in particular, become politically disenfranchised and dependent on high-tech ARTs. Because infertility is seen as a private matter of genetics and personal health, rather than a systematic problem of poor nutrition, exposure to environmental toxins, or male violence, women are paradoxically made to feel that the problem of infertility is their own fault, yet they are unable to do anything about it without the intervention of a medical expert. Since women may see their own bodies as the problem, this can also discourage them from organizing politically to expose systematic contributors to infertility and to demand better public health policies. Meanwhile, the physical and emotional health of infertile women—the vast majority of whom will never even access IVF, let alone conceive a child through it—continues to deteriorate since the root causes of reproductive problems and infertility taboos remain unaddressed.

The ecological implication is that IVF’s ability to mask the effects of environmental toxins on human reproductive health can also mask the effect of these same toxins on the reproductive health of ecosystems. Bisphenol A, polychlorinated biphenyls and pharmaceutical

---


292 Gaard, *Reproductive Technology, Or Reproductive Justice?*, 103-29.
residues, for instance, have also been linked to declining fertility in eagles, otters, minks, gulls, alligators, dolphins and various fish, among others.\(^{293}\) IVF, then, conceals these contributing root causes of infertility in humans as well as in wildlife, while also concealing the interconnections between human and ecosystem reproductive health.

**Overconsumption of Resources**

As previously noted, the medical costs of IVF are very high, and the cost-effectiveness of treatment, compared to lower-cost and equally-effective alternative treatments, has not been adequately demonstrated.\(^{294}\) Certainly, the appropriateness of medical interventions cannot be determined by cost-effectiveness alone; e.g., palliative treatment for terminally ill patients has effectively a 0% success rate (if by “success” we mean “cure”), but such expenses are justified because they support other aims of medicine, such as the relief of suffering and respect for dignity.\(^{295}\) However, the testimonies of women IVF-patients suggests that these other medical goals are not met by IVF.\(^{296}\) Moreover, IVF is a non-essential procedure, since infertility is not a life-threatening condition, and IVF is often not medically required for the person actually receiving treatment, as when a fertile woman undergoes IVF due to her partner’s infertility.

Although many non-life-saving procedures are considered the legitimate domain of medicine – e.g., limb prosthesis – these procedures also tend to support other accepted medical goals. Given

\(^{293}\) See note 286 above. See also: Brandt et al., *Pharmaceuticals in a Healthy Environment*, 18-19.

\(^{294}\) Pandian et al., *IVF for Unexplained Subfertility*, 270-72.


the uncertain cost-effectiveness of IVF and high levels of physical and psychological suffering associated with treatment, it becomes difficult to justify the significant financial costs of IVF.

In addition to the considerable financial resources used in IVF, this technology also requires, of course, doctors, clinical staff, medical buildings and equipment, drugs, researchers and laboratories, and considerable administrative, legal and political resources to regulate and oversee IVF, as well as travel and tourism infrastructure for CBRC. Yet, public and governmental debate on IVF rarely, if ever, addresses concerns about the sustainability of this technology. In Israel, plans to limit state coverage of IVF led to intense public outcry, as the issue was framed largely as a matter of fundamental reproductive rights and compassion for the suffering of infertile women, which, commenters argued, had to be upheld at all costs.297 In fact, women were praised for undergoing endless rounds of treatment, sometimes spanning a decade or more.298 In Canada, the Royal Commission on New Reproductive Technologies acknowledged that new technologies can sometimes have unexpected and negative environmental consequences.299 However, no such risks were perceived with IVF, and, as in the Israeli context, “individuals often [demanded] access to treatments and technologies as a right, seemingly without regard to the social implications or financial consequences for the health care system.”300 The British Warnock Report did briefly mention IVF’s possible contribution to

---

297 One presenter to the Committee on the Status of Women commented, “Because of financial considerations they’re [Ministry of Finance] starting to interfere in something they’re not even allowed to touch, regardless of its financial cost.” However, economic arguments supporting IVF were also heard; e.g., “So what should we do [if IVF funding is to be reduced]...we’ll bring immigrants, OK, how much does each immigrant cost us? Quite a lot more than [the cost of IVF treatments]! So what are we saving here?” See: Gooldin, Emotional Rights, 94.

298 Birenbaum-Carmeli, Cheaper than a Newcomer, 908, 916-17.

299 Royal Commission on New Reproductive Technologies, Proceed with Care, 24.

300 Ibid., 31. It is certainly possible to imagine that some of these implications may paradoxically include harm to women from cuts to health care services elsewhere to compensate for high ART spending.
unsustainable human population growth; however, the issue was quickly dismissed as outside of the inquiry’s scope.\footnote{Department of Health and Social Security, \textit{Warnock Report}, 9.}

IVF is not a uniquely expensive or resource-intensive technology, and high cost alone is not an indicator of ethical non-permissibility.\footnote{E.g., in Israel, the world’s highest IVF user, the direct annual medical costs of cancer, hypertension and cardiovascular disease treatment each far exceed those for “female infertility” (including \textit{in vitro} fertilization). See: Gabriel Chodick et al., “The Direct Medical Cost of Cardiovascular Diseases, Hypertension, Diabetes, Cancer, Pregnancy and Female Infertility in a Large HMO in Israel,” \textit{Health Policy} 95 (2010): 271-76.} But in a way, this is beside the point, since Western medicine as a whole has been roundly criticized for a certain exorbitance, whereby an estimated 90\% of all the world’s health expenditures are spent on people bearing just 10\% of the burden of disease, while much of the remaining world population, disproportionately women, struggles to access clean water and basic sanitation.\footnote{Solomon R. Benatar, Stephen Gill, and Isabella Bakker, “Making Progress in Global Health: The Need for New Paradigms,” \textit{International Affairs} 85, no. 2 (2009): 349.} Thus, the significant use of resources in IVF, with too little regard for efficiency or waste, appears to mimic the general pattern of mass consumption and consumerism prevalent in Western societies. Indeed, in a world where the average human already uses an estimated 20\% more biologically productive land than is sustainable, it would be ecologically catastrophic to raise levels of Third World (medical) consumption to Western standards.\footnote{WorldWatch Institute, “The State of Consumption Today,” (2013), www.worldwatch.org/node/810.} The demands of global racial, sexual and environmental justice require, therefore, a drastic reduction in Western consumption, not the worldwide export of costly, ineffective and non-essential medical technologies.

As many proponents of IVF have rightly pointed out, it is not fair to ask of IVF and fertility patients what we do not ask of other medical technologies and other patients (that is, self-imposed limits for the sake of global equity and sustainability).\footnote{Singer, \textit{IVF: The Simple Case}, 546; Steinbock, \textit{A Philosopher Looks at Assisted Reproduction}, 547.} Rather than accept the
status quo in the pretence of fairness, however, IVF can become an important starting point for also challenging other resource-intensive medical technologies and the entire structure of Western super-consumption.

Pollution of Bodies and Ecosystems

As previously noted, IVF routinely employs a litany of pharmaceuticals to strictly regulate and manipulate the female reproductive cycle, and even in very small concentrations these substances can have deleterious effects on women, including nausea, breathing and vision problems, emotional instability or even death.  

306 Patients may also experience complications due to anaesthesia or secondary procedures related to treatment—e.g., complications from emergency surgery for ruptured cysts.  

307 Furthermore, excreted IVF drugs may have negative consequences for wildlife. Levonorgestrel, a progestin used in oral contraceptives and some IVF protocols, has recently been found to seriously impair reproduction in frogs and fish at concentrations that are currently found in some sewage effluent.  

308 Ethinyl estradiol, a type of estrogen also commonly used in contraceptive pills and IVF cycles, has also been linked to sterility and sex changes in fish around the world.  

309 Unfortunately, in most, if not all cases, little is known about the possible synergistic effects of IVF medications, and they are typically not

---

306 See Chapter 1, section “Women and IVF,” and Chapter 2, section “Medical Controversies.”


308 Brandt et al., Pharmaceuticals in a Healthy Environment, 19, 40-41; Christina Rudén, Karin Liljelund, and Helene Hagerman, eds., Towards Sustainable Pharmaceuticals in a Healthy Society: MistraPharma Research (Stockholm: MistraPharma, 2010), 14.

subject to drug-drug interaction studies even though it is known that mixtures of anthropogenic chemicals can have unpredictable and extremely complex toxic effects.\textsuperscript{310}

In addition, some women have reported seemingly arbitrary changes in medication dosage, sometimes with doses much higher than the recommended amount.\textsuperscript{311} One American leader in IVF boasts on his website that in 1997 he became the first to introduce Viagra® to enhance the thickness of the uterine lining in IVF patients, even though this drug is specifically contraindicated for women.\textsuperscript{312} Even where standard IVF drugs are concerned, recent research still struggles to understand how dosage ought to be individualized to particular patients.\textsuperscript{313} For instance, in 2000, a team of Dutch researchers noted that “a convincing dose recommendation for GnRHa in IVF treatment does not yet exist,”\textsuperscript{314} even though GnRHa became commercially available for use in the UK the previous year.\textsuperscript{315} Unfortunately, there is a clear conflict of interest where most IVF drug research is concerned since it is explicitly performed on paying patients, typically without their knowledge of the innovative nature of clinical IVF practice. An early French textbook, for example, noted that “it no longer appears possible to consider the marketing


\textsuperscript{311} Rowland, \textit{Living Laboratories}, 56-57.


of new drugs for stimulating the gonadic-pituitary axis unless they have been tested within the framework of IVF.”

Nonetheless, some doctors and researchers have denied that women’s symptoms are related to drug treatment.\(^{317}\) One prominent leader in the field of reproductive medicine dismissed women’s negative reactions to IVF treatment, claiming that “the side effects which...women claimed were due to treatment by [clomiphene] such as depression, lethargy and impaired vision are NOT consistent with the side effects doctors would expect during or after the use of this drug.”\(^{318}\) In response to allegations that clomiphene citrate functions similarly to diethylstilbestrol (DES), the infamous cancer- and infertility-inducing drug widely prescribed to pregnant women during the 1950s and 1960s,\(^{319}\) the same physician also stated that “the structure [of clomiphene] is NOT almost identical to DES,”\(^{320}\) even though the structural and functional similarities between these drugs are openly acknowledged by researchers and IVF clinics alike.\(^{321}\) When some IVF experts do acknowledge problems, this is not always out of concern for the patient’s health. One doctor stated that findings on the dangers of IVF must be viewed with “extreme caution in order to avoid sending a message of alarm about abnormalities that might

---


\(^{317}\) See notes 118 and 119 above.


\(^{319}\) DES (diethylstilbestrol) is regarded as a classic and catastrophic failure of Western gynecological medicine; the drug was widely prescribed to pregnant women from the 1940s to 1970s in order to reduce the chance of miscarriage, but was later found to cause breast cancer in women who had taken the drug, and severe reproductive problems, including infertility and cancers of the reproductive tract, in their daughters. It is devastatingly ironic that some of these daughters are now being prescribed clomiphene citrate to alleviate DES-related fertility problems. See: Gaard, *Reproductive Technology, Or Reproductive Justice?*, 112; Rowland, *Living Laboratories*, 50.

\(^{320}\) Klein and Rowland, *Hormonal Cocktails*, 343.

occur in progeny after in vitro fertilisation or other treatments”\textsuperscript{322}—that is, such studies are only worrisome because they might (justifiably) scare women away from treatment, not because IVF may result in bodily harm. IVF practitioners have thus developed what Klein and Rowland call a “wait and see” approach to treatment – i.e., women are subjected a variety of clinical innovations, and researchers “wait and see” if complications will become statistically significant enough to warrant concern.\textsuperscript{323} It is worth noting that much of this needed research never occurs.\textsuperscript{324} Thus, as Mira Shiva has observed,

The question is not merely one of side effects; it has to do with denial of information; about who benefits and who loses when decisions are made regarding certain technologies; about who controls them and who is controlled by them; who pays in terms of money and who in terms of health; who carries out and who sponsors the research.\textsuperscript{325} It is obvious that in the present situation, women must approach IVF with extreme suspicion; even consumer advocacy groups are often funded by pharmaceutical companies,\textsuperscript{326} meaning that those who benefit from IVF too often are also those who control information about it. Even so, the information that is available raises serious concerns about the safety of treatment for humans and wildlife alike.

\textit{Women, Patriarchy and the Environmental Crisis}

In addition to the physical harm women may face during IVF treatments, it is notable that patients often also report feelings of detachment from their bodies during treatment, despite deep trust in the technology and their doctors. Benjamin and Ha’elyon found that this dehumanizing

\textsuperscript{322} Rowland, \textit{Living Laboratories}, 60.
\textsuperscript{323} Klein and Rowland, \textit{Hormonal Cocktails}, 337.
\textsuperscript{324} Klein, \textit{Test-Tube Women}, 169.
\textsuperscript{325} Shiva, \textit{Environmental Degradation}, 88.
\textsuperscript{326} E.g., the Infertility Awareness Association of Canada (www.iaac.ca) and Resolve: The National Infertility Association (www.resolve.org).
detachment was a crucial coping mechanism for women experiencing the surprising pain and humiliation of IVF treatments: “I felt like an experimental instrument of theirs”; “I did it all…[l]ike a robot”; “I treated my body like a machine.” This phenomenon of detachment can be exacerbated by the commercialization of gamete or gestation services. Surrogate mothers, for example, may distance themselves from the unborn baby since they believe it is not their child. One study found that sperm donors were overwhelmingly uninterested in their potential children, and that future donations were contingent on this continued detachment.

Furthermore, in order to retrieve the necessary sperm for IVF, men are typically given pornography at the clinic to stimulate themselves—an act that is facilitated by the sexual exploitation of a nameless woman who herself is completely detached from the treatment. Participants are therefore compartmentalized into constituent parts: body, soul, uterus, egg; infant as both product and child; mother as donor, incubator or care-taker—each component seemingly unaffected by, or unrelated to, the whole. According to Radin’s theory of market-inalienability, the sale and purchase of reproductive services is inherently alienating.

Bodily integrity is an attribute and not an object…. Systematically conceiving of personal attributes as fungible objects is threatening to personhood, because it detaches from the person that which is integral to the person…. Market rhetoric, the rhetoric of alienability of all ‘goods,’ is also the rhetoric of alienation of ourselves from what we can be as persons.

---

327 Benjamin and Ha’elyon, *Rewriting Fertilization*, 674-75; Corea notes that there is an element of abuse in this dynamic: in the beginning of an abusive relationship there is trust, but the woman is then surprised by the violent reality of the relationship. As in IVF, Corea recalls, women in abusive relationships typically cope by employing a body/soul detachment mechanism; an exit point or an attempt to end the relationship (or treatment) only comes when this detachment is no longer psychologically tenable. See: Gena Corea, “What the King Can Not See,” *Women & Health* 13, no. 1-2 (1988): 86.

328 Javda et al., *The Experiences of Surrogate Mothers*, 2196.


330 Ertman, *What’s Wrong with a Parenthood Market*, 41.

Thus the supposed autonomy that is exercised in commodifying and selling one’s reproductive capacities paradoxically turns the person into an object or piece of property. It must be remembered that even in the supposedly “simple case” of a married, heterosexual couple using their own bodies and gametes, IVF always remains a commercial transaction—even if it consists of “purchasing” the reproduction of one’s own child.

As Gaard explains, the bodily compartmentalization and alienation that is at work in IVF is also fundamental to all systems of oppression: “This system relies on a process of alienation of self from other, and the associated identity formations that emphasize a valued feature possessed only by the self. Alienation is followed by hierarchy, valuing self above other, and then by justifying the subordination of an inferior other.” For example, humans may perceive themselves as different from other animals due to their use of reason and logic, and this becomes a justification for the supposed inferiority of other-than-human animals. In reality, it is this total alienation of humans from the natural world that is at the root of the environmental crisis today. Carol Christ argues: “We have lost the sense that this Earth is our true home, and we fail to recognize our profound connection with all beings in the web of life. Instead, many people uncritically accept the view that ‘man’ is superior to ‘nature’ and has the right to ‘use’ the natural world in any way ‘he’ sees fit.” IVF thus becomes intimately linked to the environmental crisis as it supports, and is informed by, an oppressive system of alienation, compartmentalization and commodification. This is especially apparent in the way that the

---


333 Gaard, Reproductive Technology, Or Reproductive Justice?, 120; Compare to Corea’s notion of alienation: “Alienation is the separation of a human being from the world and from the experience of the world; it is a negation of self.” This suggests that alienation can have complex and variable effects, depending on the context: negation of self (as in IVF), negation of other (as in racism or sexism, e.g.), or possibly some combination of these two. See: Gena Corea, “The Mother Machine,” in The Ethics of Reproductive Technologies, ed. Kenneth D. Alpern (Oxford: Oxford University Press, 1992), 224.

334 Christ, Rethinking Theology and Nature, 58.
dominant scientific paradigm, as previously discussed, legitimizes dangerous experimentation on both women and ecosystems under the assumption of scientific neutrality. Razak contentiously compares this dual mistreatment of women and ecosystems to rape, noting that the “cultural rape” of women which dominates the field of healthcare generally parallels our “rapacious attitudes toward the Earth itself.”

Sadly, the metaphor of rape to describe the scientist’s dominion over Nature has a long historical precedent, and feelings of sexual degradation have been reported by couples who have undergone post-coital tests as part of their IVF treatment. The physician’s patriarchal “dominion” is also visible elsewhere in the doctor-patient relationship. An early researcher openly admitted to “poaching” women’s eggs for IVF experimentation. Another doctor referred to egg donation as the “redeeming salvation” that only he could provide. In India, infertility specialists are routinely portrayed as demigods; the mother of the country’s first IVF-child exclaimed to the media: “We consider [Dr.] Indira Hinduja God.... I feel she [the baby] is her daughter.”

Women are often aware of these unequal power dynamics, and this can motivate them to accept undesired treatment for fear that challenging the physician and clinic staff will have them removed from the IVF program.

---

335 E.g., the haphazard implementation of IVF protocols, or the widespread application of poorly understood pesticides, such as DDT. Refer to notes 266 and 267 above. See also: Birenbaum-Carmeli, *Cheaper than a Newcomer*, 907; Rachel Carson, *Silent Spring* (New York: Houghton Mifflin, 2002); Mies, *NRTs: Sexist and Racist Implications*, 175.


340 Birenbaum-Carmeli, *Cheaper than a Newcomer*, 906.


Conversely, others find it inconceivable to question either the doctor or the procedures, even in the face of failure, because of a strong belief in the neutrality and certainty of science. One couple observed, “That procedure is mathematically certain.... Absolutely certain. Of course, if something goes wrong it is inevitable to ask myself: what have I done wrong in those fifteen days?”

Even seemingly benevolent procedures can have this effect, such as when women are shown their eggs or embryos under the microscope, or are given an ultrasound, both intended to reassure the patient of the egg’s or offspring’s proper development; in reality, these procedures heighten the doctor’s status since only s/he can provide access to this much-desired information. It is significant that in many, if not most, cases, the physician is male, reinforcing the classic hierarchical dualism between the active and rational male knower, and the passive but wild, defective female object of inquiry. This unequal power distribution is demonstrated, e.g., by British law, which does not grant women any right of access to treatment, but includes provisions to protect aristocratic (patriarchal) bloodlines and gives providers a mandate to assess the suitability for motherhood of candidates—typically, doctors only deem women who are white, heterosexual, married (in some cases, also English-speaking) to be “deserving and appropriate.”

For Corea, the processes of alienation and manipulation at work in IVF are not unique to this technology. She notes, for instance, that in ancient societies, men routinely appropriated

---


women’s birthing role through spiritual re-enactments and puberty rites. The underlying motivation, according to Corea, is the “basic patriarchal myth” of “single parenthood by the father,” which is fuelled by men’s own alienation from the process of childbirth and consequent dissatisfaction with human (male) limitation. Reproductive technologies thus become an important arena for resolving this psychological tension, as predominantly-male scientists work toward ever-greater control over women’s reproduction, possibly even culminating in male cloning and ectogenesis, where women would finally become obsolete. What is important here is not necessarily the extent to which Corea’s thesis is true. What she demonstrates is that these possible ulterior motives are not simply an unethical application of an otherwise-neutral technology; they are inherent to it. Therefore, Mies argues provocatively that the inherent values of ARTs are not only sexist, but eugenic, racist and ultimately fascist as well. Indeed, when a scientist evaluates the quality of gametes and embryos before fertilization or transfer, does s/he not make a judgement that a woman’s reproductive processes need expert oversight and guidance?

Such manipulation also presumes that reproductive “material” is freely interchangeable and separable from the people that produced it, and that only certain genes ought

---


347 To say that IVF and ARTs are predominantly controlled by men is not to ignore the role of women in these domains. However, that a relative few women have reached positions of prominence in the ART community does not negate the fact that, on the whole, these technologies work to entrench gender inequalities. It is, after all, always possible for individual women to comply with the patriarchal order for certain advantages, even while it disadvantages the woman (and other women as a group) on many other levels. See: Rosemary Radford Ruether, Integrating Ecofeminism, Globalization and World Religions (Lanham, MD: Rowman & Littlefield, 2005), 93.


349 Mies, NRTs: Sexist and Racist Implications, 195.

350 One early commenter claimed that IVF was superior to natural conception due to the sterile conditions of the laboratory, revealing an underlying belief in the “dirtiness” of the female body in which conception ordinarily takes place. See: Corea, The Mother Machine (1986), 155.
to be passed on, while others eliminated. Genetic and racial concerns are certainly a motivating factor, e.g., in Israel where generous funding of IVF is openly connected to demographic concerns about maintaining a strong Jewish population in the Middle East.\textsuperscript{351} And when IVF is used to export childbearing \textit{en masse} in the form of surrogacy to the Third World, where women must often fight against forced sterilization and coercive population control strategies, the resulting message is that only the genes of rich White women are worth passing on and that women of colour ought only to reproduce in the service of others: a continuation of “ecological imperialism by which the north ravages the darker skinned south for ‘resources’ and ‘labour.’”\textsuperscript{352}

To summarize, \textit{in vitro} fertilization is not an isolated problem. Philosophically, it is related to the entire enterprise of patriarchal science and reproductive technologies in particular, that are underpinned by the conceptual hierarchical dualism between man/woman and spirit/body (Nature), as well as a false presumption of scientific neutrality. These values result in technologies deeply marked by patriarchy, where power and knowledge are distributed unequally, where violence to the body is permitted in the name of rational objectivity and scientific progress, and where people are alienated from each other and from their own bodies.

\textit{IVF & Ecofeminist Ethical Principles}

IVF can support ecofeminist ethical principles, as previously discussed. However, as the above critique demonstrates, these benefits cannot compensate for the multitude of ways in which IVF seriously conflicts with the ecofeminist ethical principles of justice, respect, autonomy, community, holism and diversity.

\textsuperscript{351} Gooldin, \textit{Emotional Rights}, 94; Birenbaum-Carmeli, \textit{Cheaper than a Newcomer}, 905-06.

Principles of justice, respect, community and holism are seriously undermined by IVF’s inattentiveness to the structural and ecological contributors to infertility, which results in concrete harm and disrespect to the bodies of women and the other-than-human. Consequently, women suffer a severe sense of alienation, from their bodies as well as from the larger biotic community in which human fertility must be understood. The principles of justice and community are especially compromised by the individualistic and commercialized nature of IVF treatment that masks more effective and equitable society-wide approaches to fertility care, and that also encourages privileged women to treat vulnerable women as cheap, disembodied sources of reproductive material and labour—all of which is supported by a philosophical conception of women and the other-than-human as passive, irrational matter, rather than as intelligent and interdependent “modes of being.” Furthermore, although supporters of IVF have highlighted its ability to subvert the traditional nuclear family and encourage more diverse social organization, in reality, this support of diversity is only superficial, since the actual practice of IVF almost always mimics the ideal of the stable, monogamous couple and their own biological children. The often intense pressure to pursue ARTs can also make it more difficult for women to choose a lifestyle other than motherhood. Finally, the use of IVF for eugenic aims is clearly opposed to human genetic diversity, as this application presupposes that only certain types of genes and traits ought to be preserved.

The principle of autonomy is perhaps the most difficult to evaluate with regard to IVF. It is becoming clear that IVF threatens women’s autonomy in many ways: through a hierarchical doctor-patient dynamic; through social pressures that make it increasingly difficult to refuse motherhood; through dangerous and experimental techniques that may cause serious harm; and through the hierarchical division of reproductive labor that allows privileged women to treat vulnerable women as cheap, disembodied sources of reproductive material and labour. All of this is supported by a philosophical conception of women and the other-than-human as passive, irrational matter, rather than as intelligent and interdependent “modes of being.”

353 Berry, *Ethics and Ecology.*
psychological and bodily harm; and through political and economic systems that make possible the exploitation of poor women for reproductive labour. Warren has argued powerfully that “if women’s right to reproductive autonomy means anything, it must mean that we are entitled to take some risks with our physical and psychological health, in the attempt to either have or not have children.”

Certainly there is some truth to Warren’s statement. However, ecofeminists have also argued that simply choosing something, no matter how authentically, does not make that choice morally correct; personal autonomy must always be balanced by concern for how one’s choices affect others, and must be evaluated against God’s law and universally accepted norms and values. Considering the harm that IVF can bring to the entire community of women and their environments, it is difficult to justify this technique for the autonomy of a relatively few women, especially when the women who are most likely to access IVF are already among the world’s most advantaged.

Yet, many women, even fully aware of these risks and harms, choose IVF anyway; moreover, they often report happiness at having had the opportunity to try IVF, even if the treatment is not successful. These women are not simply victims of ignorance or an abusive medical-machine; the choice for IVF can be genuine. Interestingly, Koch contends that, despite the genuine desire for a child, the choice to pursue IVF is typically part of a process to accept infertility and gain social recognition as an involuntarily-childless woman. Women thus always have an interest in “[playing] the game of IVF” regardless of its success or moral

---


355 Although Koch also notes that for many women, the use of IVF is a natural next-step to a lifetime of reproductive decisions within the “medicotechnical services of the health system,” raising certain questions about the ability of women to achieve autonomy outside of this system. See: Lene Koch, “IVF—an Irrational Choice?” *Issues in Reproductive and Genetic Engineering* 3, no. 3 (1990).
dimensions. This suggests two important points: first, that the rhetoric of autonomy surrounding IVF lacks an internal critique by which to evaluate the appropriateness of treatment, since women will always have some reason to choose IVF, regardless of all its other negative aspects. Secondly, women’s choices to pursue IVF are not related to the technology in and of itself. “As each new reproductive technology enters the market, the definition of infertility changes. Infertility can only be defined as the condition that no reproductive technology can resolve.” Thus, what women tend to choose is not IVF per se, but a socially-acceptable resolution to their infertility. In this light, it again becomes dubious that IVF enhances women’s autonomy, when, for the most part, it simply prolongs the attainment of this resolution. Furthermore, these findings reemphasize that genuine reproductive autonomy will be better based on preventing infertility in the first place, as well as on the development of better social mechanisms for dealing with—indeed, for celebrating—a diversity of family models, including childlessness, whether intentional or not.

Conclusion

Ecofeminists embrace an ethical model which values justice, respect, autonomy, community, holism and diversity. Although IVF can further these ethical principles to some extent, it is typically not a means for realizing these values, since: IVF fails to respect women and the other-than-human when they are physically and spiritually harmed by this technology; IVF promotes relationships of injustice and a fragmented view of humanity and the other-than-human when it endorses the super-consumption of affluent medical consumers and the use of

---

356 I.e., either IVF is successful and the woman has the much-desired child, or IVF fails and she can finally accept her status as “involuntarily childless.” See: Ibid.

357 Ibid.
disenfranchised women as reproductive labour; the needs of communities are ignored by the individualistic framework of IVF, which serves to diminish both genetic diversity and the acceptance of genuinely diverse life choices; finally, IVF reduces women’s autonomy by superficially catering to the notion of “choice” without questioning the quality of choice afforded by IVF, or the social structures which influence such choices.

The final question that must be asked is: why does this matter theologically? Although the Roman Catholic magisterium has already taught extensively on ARTs and has unequivocally rejected IVF as a licit medical technology, its discussion on women and ecosystems with regard to IVF has been virtually nonexistant. The final chapter, therefore, will explore the Christian foundations of ecofeminism and will demonstrate why an ecofeminist analysis of IVF supports the Church’s current teaching.
Chapter 4

Ethical and Theological Implications

The thesis so far has discussed some medical aspects of *in vitro* fertilization, explored the many controversies associated with this technology, and presented an ecofeminist critique of IVF. This critique hinges on the harm, especially physical, caused to women and Earth by IVF. In this final section, I will defend the thesis statement by demonstrating that Christ’s loving and all-inclusive Incarnation gives value to all bodies and inaugurates God’s reign of peace and justice for women, ecosystems and all Creation. Medical procedures that cause harm to women and ecosystems, therefore, are not morally defensible.

**Ecofeminism: A Theology of Life**358

The construction of an ecofeminist theology has various starting points. For many, theologizing naturally begins with the doctrine of Creation. While classical theological models have typically seen humans as the peak of Creation and God as an otherworldly omnipotent ruler “essentially separated from and over against the world which is created to serve ‘Him’,”359 a major problem with this model is that it engenders the same oppressive hierarchical dualisms (spirit/male over matter/female, and human over other-than-human) that ecofeminists have so powerfully criticized. For Thomas Berry, this “alienating emphasis” and “anthropocentric exaltation of the human” are among the root causes of the environmental crisis today, and they are a chief reason why the primary religious and humanist traditions of the West have been

358 With the exceptions of Sallie McFague and Dorothee Sölle, all the theologians cited in this section work primarily from the Roman Catholic tradition.

unable to deal effectively with both the technical and moral dimensions of the ecological crisis. As a result, the model of the distant Creator God cannot offer Christians a “functional cosmology” – i.e., a credible account of the place and role of humans in the universe.\textsuperscript{360} Ecofeminist theologians have sought, therefore, to establish such a cosmology by developing models of God and Creation that are more relational and that take account of the universe as “the primary sacred community, the primary revelation of the Divine.”\textsuperscript{361} For Eaton, this means “[taking] the Earth seriously,” including all of its physical and biological processes.\textsuperscript{362} Eaton’s study of evolution, for instance, challenges the centrality of humans to the universe and questions the existence of ontological divisions between humans and the rest of Creation. In this view, humans have agency, but not control over Nature, and God’s action “is embedded in evolutionary dynamics, not extraneous to it.”\textsuperscript{363} McFague’s work also decenters humans from the pinnacle of Creation, to one of many partner-creatures belonging to and sharing our true home, Earth.\textsuperscript{364} She proposes the model of the universe-as-God’s-body as a powerful way of imagining the place of God and humans in the world. One of the primary implications of this metaphor is that if God is in some sense embodied, then physical matter is not only good, but also sacred.\textsuperscript{365} What this also emphasizes is that we do not simply have bodies, we \textit{are} bodies. As McFague notes, Christianity is a religion of profound embodiment owing to beliefs about the Incarnation, Christology, the Eucharist, the resurrection of the body, and the Church as the body of Christ.\textsuperscript{366}

\textsuperscript{360} Berry, \textit{Ethics and Ecology}.
\textsuperscript{363} Ibid., 17.
\textsuperscript{364} McFague, \textit{An Earthly Theological Agenda}, 94.
\textsuperscript{365} Ibid., 95; McFague, \textit{The Body of God}, 23.
\textsuperscript{366} McFague, \textit{The Body of God}, 14.
Bodies matter. Therefore, bodies (including other-than-human bodies) are sacramental, a
“meeting place with God.” This point is especially salient for women since women’s bodies,
in particular, have historically been disparaged by the Roman Catholic tradition and identified as
sources of sin.

A focus on the goodness of bodies is reinforced by renewed understandings of
Christology and the Incarnation. Johnson’s ecofeminist Christology envisions Jesus as Sophia,
the personified divine wisdom of God. Because Johnson argues that Sophia is the basis for
Jesus’ ontological relationship with God, rather than his male “sonship” (that is, Jesus is Christ
not because of gender, but by relationship to God), the second person of the Trinity “does not
essentially need the male imagery for its Christological affirmation.” What is at stake here is
women’s salvation: if we take seriously Gregory of Nazianzus’ proclamation that what God has
not assumed, God has not saved, then Jesus’ taking on of maleness in a way that he has not
with femaleness seriously jeopardizes Jesus’ salvific action for women. By denying the
ontological importance of Jesus’ maleness, however, Johnson is not only concerned with
including women among the beneficiaries of Christ’s redemption, but all of Creation as well. The
prologue of John’s Gospel is foundational for her: “The Word became flesh and dwelt among us,

---

367 Ruether, Integrating Ecofeminism, Globalization and World Religions, 76; cf., McFague, The Body of
God, vii.

368 O’Neill, Creation and Anthropology, 288.

369 Elizabeth A. Johnson, She Who is: The Mystery of God in Feminist Theological Discourse (New York:
Crossroad, 1992).

370 Ibid., 95-98.

371 “Gregory of Nazianzus on Apollonianism,” in The Christian Theology Reader, ed. Alister E. McGrath,

372 Historically, this question was resolved by Aristotelian biology, which stated that females were actually
defective males, produced by some gestational problem, and therefore the normative male was metaphysically the
“head” of the female and included her. However, this view is at odds with both modern biological knowledge and
contemporary Church teaching that affirms the equal dignity of men and women as equally created in the image of
God. See: O’Neill, Creation and Anthropology, 292; Ruether, Sexism and God-Talk, 96.
full of grace and truth.” (Jn 1:14) In the original Greek language, the Word does not become *anthropos*, meaning human, but *sarb* (flesh), which indicates a broader reality of physical existence.373 This broader reality is the vast cosmological, evolutionary context from which all of Creation has emerged. Thus, like us all, Jesus’ body was composed of atoms originally produced in the nuclear fusion reactions of ancient stars; his cells were built from the components of other plants and animals he consumed (and that they consumed previously); and his DNA was inherited from countless generations of Earth-creatures dating back to the very first unicellular organisms. Johnson therefore concludes, “The *sarx* of Jn 1:14 thus reaches beyond Jesus, and beyond all other human beings, to encompass the whole biological world of living creatures and the cosmic dust of which they are composed.”374 If the Incarnation itself is redemptive, then, this means that Christ’s salvation is extended to all Creation: women, men and other-than-human alike. This cosmic Incarnation also offers renewed insights for understanding Jesus’ death and resurrection. Because the Roman Catholic Church professes belief in the resurrection of the entire person, body and soul,375 the risen Christ offers hope of new life not just for humanity, but for the entire cosmic community in which Jesus was inextricably bound.376 St. Ambrose perhaps puts it best: “In Christ’s resurrection, the Earth itself arose.”377

For LaCugna, the intimacy that Jesus shares with the whole of Creation is reflected in the life of the Trinity itself, since the very nature of God is to be in relation with others. This vision of divine communion thus carries an important ethical imperative of “right relationship.” LaCugna writes, “because it affirms that persons, whether divine or human, are made to exist in

374 Ibid.
375 *Catechism of the Catholic Church* (Vatican, 1993), I.II.III.XI.990.
377 Ibid.
loving communion with one another, the doctrine of the Trinity is...the foundation for a vision of society and a vision of the church which is to be a sign to the world of the ultimate destiny of all creatures.”

LaCugna’s communitarian vision is supported by the exegetical work of Ruether, who argues that liberation is the normative principle of the Biblical texts, evident especially in the prophetic tradition of the Old Testament and in Jesus’ earthly mission. Passages in the books of Isaiah, Amos and Jeremiah, for instance, forcefully criticize exploitative practices of the Israelites, and denounce the powerful elite who are especially responsible. Jesus is equally concerned with the creation of a just social order; he proclaims in the Gospel of Luke, e.g., “The Spirit of the Lord is upon me, because he has anointed me to bring good news to the poor. He has sent me to proclaim release to the captives and recovery of sight to the blind, to let the oppressed go free, to proclaim the year of the Lord’s favour.”

The Judeo-Christian belief in a God who acts and is present in history means that Jesus’ proclamation cannot be understood in a purely spiritualized manner, and his own ministry—e.g., feeding of the multitude, raising of Jairus’ daughter, healing of the lepers and the blind man—reflects the concreteness of his claims. In fact, Ruether argues that the vindication of the lowly and oppressed in this life is precisely the reason for God’s intervention in history. Jesus’ ministry thus inaugurates and anticipates a future society of just relationships and overturned systems of oppression, liberated from sin: in short, the Kingdom of God.

Importantly, God’s liberation and vindication of the oppressed is not simply a “triumphant reversal of domination,” where the previously oppressed classes rule unjustly over their enemies. The prophetic language of servanthood that Jesus adopts points to

---

380 E.g., Is 10:1-2; Am 8:4-6; Jr 7:4-11; See ibid., 24-27.
381 Lk 4:18-19.
relationships built on mutual self-giving and enhancement—a belief that St. Paul seems to have shared when he reminded the Corinthian church that, in imitation of Jesus’ becoming poor for our sake, “others should [not] have relief while you are burdened, but that as a matter of equality, your surplus at the present time should supply their needs, so that their surplus may also supply your needs, that there may be equality.” (2Co 8:13-14) The messianic hope for equality, justice and liberation extends to all oppressed groups, since “we cannot criticize the hierarchy of male over female without ultimately criticizing and overcoming the hierarchy of humans over nature.”

Farley nicely summarizes ecofeminist theology as “a view of a God who takes the whole of Creation seriously, and a view of Creation which does not see predatory hierarchy as the basis of order.” Rather, Christian ecofeminists see inclusiveness and interdependence as the constitutive realities of the universe, in accordance with belief in a Holy Trinity that embodies both multiplicity and unity, as well as ecological and evolutionary knowledge. This dynamic of unity and difference becomes a call to “solidarity of humans with God, the Earth, and all its

383 Farley rightly notes that women have often been socialized into roles of self-sacrificial servanthood in ways that men are not, to women’s detriment. As Ruether argues, however, the importance of Jesus’ example is that it stands in sharp contrast to both male behavioural norms (e.g., socialized aggression) and the messianic expectation of a vengeful warrior hero, thus calling all people to mutual servanthood (and consequently, mutual growth). See: Farley, Feminist Theology and Bioethics, 167; Ruether, Sexism and God-Talk, 30; Rosemary Radford Ruether, “Ecofeminism: The Challenge to Theology,” in Hessel and Ruether, Christianity and Ecology, 107-08.

384 Ruether, Sexism and God-Talk, 73.

385 The sense of human responsibility here echoes ecofeminist notions of humans as “co-creators” with God: far from being the “source, power, and goal” of Creation, humans are nonetheless called to help “the creative process” (arguably also the eschatological process) “to continue and thrive on our planet.” See: McFague, An Earthly Theological Agenda, 94-95.

386 Farley, Feminist Theology and Bioethics, 173-74.

life forms,” since, just as God “delights in the existence of something other than Himself,” so are humans called to delight in and empathize with the Other. However, ecofeminists are keenly aware that this perfect loving society does not yet exist. Under patriarchy, humans have developed a fear of the Other and built distorted relationships based on violence and exclusion. Ruether has argued that in some respects traditional Creation theology has taught that conformity to these relationships was a means of salvation; hence, woman’s subjugation is seen as a result of her role in the Fall, from which she can only be absolved by accepting her inferior status and awaiting her spiritual, heavenly reward. Conversely, because ecofeminists reject wholly-spiritualized notions of redemption and emphasize the coming of God’s reign here on Earth, in this life, ecofeminists also reject theologies which validate the “usurping [of] power over others,” as if otherworldly spiritual equality is unconnected with justice in this life. Ecofeminist theology is thus essentially utopian, painting a picture of how things ought to be and providing hope for a liberated future. This liberated future can only be achieved by an ethic of mutual self-giving and self-limitation that honours both the sustainability requirements of the whole community, as well as a preferential option for the poor and oppressed. An important underlying belief of this ethic is the recognition of finitude and death as inherent and necessary.

---


aspects of Earthly existence, rather than the results of sin. Ecofeminism is therefore also fundamentally a theology of life, dedicated to celebrating and upholding the dignity of life in all its messy, complicated, diverse and fruitful forms. It is within this framework that the ecofeminist bioethical principles outlined previously must be understood.

**IVF, Ecofeminism and the Magisterium: A Final Analysis**

In the previous chapter, I argued that IVF is morally problematic from an ecofeminist perspective because it masks the structural causes of human and ecological infertility, disenfranchising both women and ecosystems; it contributes to the pollution of women’s bodies and the environment through a system of mass, unjust overconsumption; and it legitimizes oppressive hierarchical ideologies of domination—that is, IVF can, and does, harm women and the other-than-human environment. The theological implications of this are significant, since the devaluation of physical Creation that is actualized in IVF seriously conflicts with ecofeminist understandings of Creation, the Incarnation and the coming Kingdom of God.

McFague writes, “Whatever else salvation can and ought to mean, it does involve...first and foremost, the well-being of the body.” To put it most forcefully, then: IVF hinders the salvation of women and other-than-human Creation because it causes harm to bodies. This happens when women experience painful and dangerous side-effects of IVF, disproportionate to the possibility of benefit, or when they must psychologically dissociate from their bodies in order to tolerate the pain of treatment. Bodies are further harmed by the environmental pollution and

---

395 There exists in much ecofeminist writing a tension between accepting death and limitation, in general, as a necessity of life (“natural evil”), while denouncing particular instances of death and destruction that are cruel and unjust (“unnatural evil”). See, e.g., Dorothee Sölle, *The Mystery of Death* (Minneapolis, Minn.: Fortress Press, 2007); Ruether, *Integrating Ecofeminism, Globalization and World Religions*, 114-15.


culture of mass overconsumption to which IVF contributes, as well as by the ecological and social conditions that contribute to human and other-than-human fertility problems in the first place, and that IVF conceals. Because the patriarchal philosophy that underpins IVF holds such a profound distrust of the body and physical creation, participants in IVF can be prevented from encountering the body as a sacrament and a meeting place with God. Furthermore, the privatized, individualistic nature of IVF that prevents participants from seeing the interconnections between human and ecological health, and that validates the exploitation of certain oppressed people and species as reproductive “material,” are antithetical to the Trinitarian belief that the very nature of life is to be in-relation and in loving communion with others. On the contrary, IVF tends to promote relationships of alienation and domination insofar as it encourages dangerous experimentation, reckless consumption and pollution, the commodification of reproduction, and the conceptualization of women and the other-than-human as inferior Others; these dynamics are opposed to the ecofeminist bioethical principles of justice, respect, autonomy, community, holism and diversity, as well as Jesus’ example of liberating mutual servanthood. His loving, all-inclusive Incarnation, ministry and Resurrection show us that bodies matter; not just the bodies of the doctors and technocrats who control IVF or of the few relatively-privileged people who have access to this technology, but all bodies. This means that the bodies of women undergoing treatment, of doctors and technicians providing care, of surrogates and donors selling their services, of children thus conceived, and of Earth itself, all become sites in which Christ’s redemption is worked out. However, the fullness of this redemption—the Kingdom of God—requires “working for liberation from evil in all its forms.”

398 If it is true, as I have argued, that IVF causes concrete harm to the bodies and ecosystems in which it occurs, then, far from

promoting “liberation from evil,” IVF actually advances evil precisely where humans are called to build the Kingdom and help manifest the fullness of God’s cosmic plan of redemption and salvation. Therefore, since IVF causes harm to bodies and ecosystems, and promotes sexist and environmentally degrading social structures that favour divisive hierarchical dualisms between men and women and between humans and the rest of Creation, the use of this technology is immoral since it fails to reflect Christ’s all-inclusive, Incarnate love, and it hinders the concrete, embodied actualization of God’s reign of peace and justice which Jesus’ earthly mission inaugurated.

As discussed in Chapter 2, the Roman Catholic magisterium’s objections to IVF rest upon particular understandings of human dignity and Natural Law that are concerned with upholding the right to life of embryos and preserving the procreative and unitive functions of marriage. These concerns have not been addressed by the thesis; nor does the bioethical teaching of the magisterium place much emphasis on the health of women and ecosystems. Nonetheless, these two analyses converge on some important points, and Benedict XVI’s Caritas in veritate is perhaps the best example of this. In his encyclical, the pope emeritus brings together issues usually considered separately as “social” or “bioethical” issues, respectively, by declaring that “the way humanity treats the environment influences the way it treats itself, and vice versa.” This teaching is based on the belief that humans are fundamentally relational beings, “a single family,” called to communion and solidarity, in imitation of the Trinity “who-is-love.” Thus, the Church affirms the basic ecofeminist insight that the well-being of both humans and Earth is radically interconnected. Benedict’s position has been dubbed by some as a

\[399\] Refer to Chapter 2, section “Roman Catholicism.”

\[400\] Benedict XVI, Caritas in veritate: Encyclical on Integral Human Development in Charity and Truth (Rome: Vatican, 2009), 51.

\[401\] Ibid., 34, 53-54.
“pro-life environmentalism” because he specifically connects care for Creation with abortion, euthanasia and embryonic research, arguing that it is hypocritical to value and protect life in some forms, but not in others.\textsuperscript{402} Although \textit{Caritas in veritate} lacks an explicit gender analysis, its focus on global justice and respect for life is compatible with ecofeminist claims about the universal sanctity of life, and demands for justice for all oppressed groups.

Indeed, justice and solidarity, especially as articulated in the principle of the preferential option for the poor, have been a primary theme of much of the Church’s contemporary social teaching, beginning in particular with Leo XIII’s \textit{Rerum novarum} in 1891, and further elaborated by subsequent “social” encyclicals.\textsuperscript{403} The Canadian Conference of Catholic Bishops has often reiterated these teachings, appealing to a “God of the oppressed,” and calling for greater gender equality, ecological balance and just distribution of goods.\textsuperscript{404} These documents have typically focused on economic and political issues, rather than medical questions; however, they share with ecofeminist bioethics a deep concern for community, justice and respect, and an acknowledgement that women and ecosystems are among the oppressed poor. This last point especially is related to the increasing recognition by the magisterium in recent decades of the dignity of women and Creation. For instance, in his apostolic letter to women, John Paul II affirms that women and men are essentially equal, and that women are right to oppose their


sinful domination by men.\textsuperscript{405} In \textit{Caritas in veritate}, Benedict XVI speaks of Creation as a divine gift that “speaks to us of the Creator” and that “is destined to be ‘recapitulated’ in Christ at the end of time.”\textsuperscript{406} An ecofeminist analysis of IVF, therefore, can be seen as an extension of the magisterium’s teaching to a particular technology that the social documents mention only in passing.\textsuperscript{407} Thus, an ecofeminist bioethics allows us to recognize as “poor” those women and ecosystems that are unjustly exploited by IVF, and to apply the principle of the preferential option for the poor to them. An ecofeminist bioethics also illuminates the “pro-life environmentalist” position by illustrating how the care of foetuses and ecosystems is also related to the care of, and respect for, women.

Among the magisterial documents that do deal explicitly with \textit{in vitro} fertilization, there is also a special concern for dynamics of domination. Often, this is expressed as apprehension about the “domination of technology over the origin and destiny of the human person,” which can imply an attempt by humans “to take the place of [the] Creator”\textsuperscript{408}—that is, an unreasonable dominion over Creation puts humans in wrong relationship with God. However, the Church also recognizes that ARTs can create wrong-relationship among people, primarily between parent and child: “Such a relationship of domination is in itself contrary to the dignity and equality that must be common to parents and children.”\textsuperscript{409} Because the ecofeminist critique is based on the apprehension of interconnected systems of oppression and domination, this hermeneutical lens helps extend the magisterium’s teaching to denounce not only dominating parent-child relationships, but all relationships of domination that IVF can foster: among women, between

\textsuperscript{405} Mulieris dignitatem, 6, 10.
\textsuperscript{406} Caritas in veritate, 48.
\textsuperscript{407} E.g., ibid., 75.
\textsuperscript{408} Dignitas personae, 17, 27.
\textsuperscript{409} Donum vitae, II.B.5.
women and men, and between humans and their environments. Arguments about the dominion and authority of God, however, have been met with much ambiguity from ecofeminists, owing in part to beliefs about the role of humans as co-creators, as well as criticisms about the mediation of God’s dominion through men. Nonetheless, belief in the inherent goodness of bodies and in the presence of God’s action through the natural processes of the cosmos entails a deep respect for the processes of reproduction. Here, an ecofeminist “wild politics” can bolster magisterial teaching by challenging the notion that human generation is a thing to be controlled, manipulated and commodified at will; rather, ecofeminism encourages us to “have trust in the excitement of life full of wild diversity and unpredictability,” just as the Church urges us to trust that “life will triumph [since]...God, who loves life and gives it generously, is on the side of life.”

**Implications**

While ecofeminist theology and bioethics often presents important challenges to traditional Church teaching, in the case of IVF, ecofeminist and magisterial analyses are complementary: while the latter takes a law-based approach that considers the inherent rightness or wrongness of particular actions, the former looks at the broader context in which IVF occurs and asks questions about the moral agents, rather than isolated acts. This broader view of the problem of *in vitro* fertilization, not so limited to foetal and marital rights, can help make the Church’s teaching more coherent by connecting it, for example, with teachings on the dignity of women, the goodness of Creation, and the preferential option for the poor. It would also offer a valuable pastoral opportunity for the Church by enabling it to better understand why women and men seek IVF, how this affects them emotionally, spiritually, physically, and ecologically, and

---


411 *Dignitas personae*, 3.
how the Church is sometimes complicit with patriarchal attitudes that promote the popularity of IVF. Crucially, this would also respond to Susan Sherwin’s feminist challenge that those who oppose IVF must work to reduce the sense of need for this solution to infertility in the first place.412

Another benefit of supplementing magisterial teaching on IVF with an ecofeminist analysis is that a contextual approach to ethical questions, one that takes into account intentions and consequences, is more in line with personalist ethical approaches favoured by Roman Catholic ethicists since the Second Vatican Council.413 While the magisterium states that IVF “must be judged in itself,”414 the ecofeminist perspective demonstrates that judging IVF in broader context can add considerable richness to the ethical analysis since “medical technologies do not exist in a moral, cultural or political vacuum.”415 Thus, while the innate mechanics of IVF are certainly crucial to consider, their full meaning can only be comprehended when one also takes into account all of the different people, communities and ecosystems involved. This suggests, in turn, that there are many different legitimate starting points for ethical inquiry on this topic: while, for the magisterium, the primary question has been “when does life begin?” it is also important to ask where the eggs come from, or who controls them.416 Such an approach could also be useful for other bioethical dilemmas that have been controversial among Roman Catholics, such as contraception – e.g., by asking questions about where contraceptives come from, or about their environmental impact.

412 Sherwin, Feminist Ethics and In vitro Fertilization, 550.
413 Kelly et al., Contemporary Catholic Health Care Ethics, 88-98.
414 Donum vitae, II.B.5.
416 Rowland, Living Laboratories, 33.
Unlike magisterial teaching,\(^{417}\) however, an ecofeminist bioethics cannot assert the intrinsic illicitness of IVF in every possible case, both out of respect for the principles of autonomy and diversity, and in recognition that the context of any given action affects the moral quality of that act.\(^{418}\) Indeed, it is not the intention of the thesis to criticize individual women who may choose IVF; as I have argued, these choices are complex and highly contextual, and they are often negatively restricted by a host of oppressive patriarchal social structures that limit women’s abilities to make truly life-affirming choices for themselves and their communities. Furthermore, as Gebara contends, all ethical decisions are necessarily imperfect, having both good and bad implications, and women must have opportunities both to freely discern moral choices and to take responsibility for all the outcomes of those choices. This does not imply a total relativism; only that, in reality, idealized absolutes cannot always account for all the variety and complexity of actual everyday ethical decisions.\(^{419}\) What this suggests, then, is that Roman Catholics ought not respond to IVF simply with an immutable prohibition. What is also needed is to work toward concrete social changes that will allow women greater opportunities for viable, life-affirming alternatives to IVF. This could include working for better environmental and preventative healthcare policies that would reduce the incidence of fertility problems. Better educational and economic opportunities for all people, including flexible work hours and fair wages, could minimize the appeal of surrogacy and gamete donation for economically disadvantaged women. And the opening up of the closed-in nuclear family to greater social involvement in, and support of, child-rearing could offer infertile persons more opportunities to develop meaningful relationships with young people, such that the intense pressure and longing

\(^{417}\) Dignitas personae, 17.

\(^{418}\) Gebara, An Ethics of Life, 41-46.

\(^{419}\) Ibid., 44.
for a child of one’s own might be lessened. Not only would these sorts of changes help reduce the sense of need for IVF, but the concrete positive effects on the well-being of all Creation that these changes could bring are both sign and proleptic effectuation of the Kingdom.

The ecofeminist approach can also be useful for other ethical problems. For instance, the magisterium has typically framed abortion in a similar way to IVF, such that the primary concern is the right to life of the embryo or foetus, independent of the mother and her particular context. This is possibly in response to frequent pro-abortion arguments that tend to collapse the embryo or foetus into the woman’s body, exemplified by the slogan “my body, my choice.” The result (among both “pro-life” and “pro-choice” advocates) is an adversarial relationship between mother and child, where the rights of women and foetuses are pitted against each other. However, the present study of IVF demonstrates that the woman’s body is perhaps the best and safest place to consider the embryo after all; a focus on women’s bodies may appear superficially to bolster claims for women’s “right to choose,” but by resisting techno-medical control of women’s reproduction, this perspective also protects the pre-born from pharmaceutical and genetic manipulation, a large degree of commercialization, erroneous egg or embryo transfer, and the “absurd fate” of eternal embryo storage. An ecofeminist bioethics recognizes that women really do care about the children we carry; that our bodies really are capable of caring for and nurturing that life; and that there is little need to “protect” our pre-born children from us. Rather, a Catholic ecofeminist bioethics, as with IVF, requires working toward non-oppressive social structures that will enable women considering abortion to make better choices:

420 Stoyle, For Now we See through in Vitro Darkly, 223.


422 Donum vitae, I.5.
e.g., improved educational, economic and environmental circumstances so that mothers can be assured of the resources required to raise their children. Again, this does not contradict current magisterial teaching on abortion, but broadens that teaching by also connecting it to Roman Catholic beliefs, e.g., on the dignity of women and authentic human development.

While ecofeminist thought can strengthen already-held Church teachings, it can also help illuminate “open questions.” For example, the magisterium has not yet spoken decisively on gamete intrallopian transfer (GIFT), and theologians currently disagree on whether this technology is a “substitute for the conjugal act” or simply “serves to facilitate” that act. An ecofeminist bioethics can bypass this stalemate by looking at the ways that GIFT affects women and the other-than-human environment. Since, from this perspective, GIFT is nearly identical to IVF, an ecofeminist bioethics would probably find this technology to be immoral.

Plastic surgery may be another area that could benefit from ecofeminist reanalysis. Here again the magisterium has not spoken decisively, although Popes Pius XII and John Paul II spoke favourably about it, noting that such procedures can help reflect a person’s beauty or contribute to the overall good functioning of the body. An ecofeminist bioethics can contribute meaningfully to this discussion through an exploration of the meanings of bodily health, diversity of bodies, and sexist and racist standards of beauty—and what this all means for cosmetic surgery’s role in liberation from sin and oppression. Moreover, because the end-point of ecofeminist theology is the building of God’s Kingdom, mediated through bodies and physical Creation, it offers a fresh perspective on all activities that harm and degrade bodies as antithetical.

---

423 Ford, A Catholic Ethical Approach to Human Reproductive Technology, 46; Donum vitae, II.B.6; Zoloth and Henning, Bioethics and Oncofertility, 264-65.

to that Kingdom. Thus, for example, extreme ascetic mortification, the overexploitation of natural resources, or even poor nutrition are not only matters of caring (or not) for God’s good Creation; they are, deeply and vitally, matters of salvation.

Finally, secular ecofeminists can benefit from a theological perspective, since the moral considerability of women and other-than-human Nature may otherwise prove to be ultimately groundless. As seen in Chapter 3, a strictly theological analysis is not required to understand the notion of patriarchy; secular feminists can and have amply demonstrated that Western cultures do discriminate against women and the other-than-human, and that these types of oppression are interrelated. What these analyses cannot do, however, is explain why it matters that women and Creation are oppressed, why we should care about their well-being. Warren concludes that the reason we ought to care for the other-than-human environment is the same reason we love our children: we just do; care for Creation can be explained, but not proven. By connecting ecofeminist theory, however, with the doctrines of Creation, Incarnation and soteriology, the Roman Catholic Church can assert that the moral considerability of women and other-than-human Creation does not rest simply on emotion or intuition, but on Christ. Women and all of Creation matter because Church teaching, informed by Sacred Scripture, tells us that bodies matter, and that these are intrinsically tied up with the entire divine plan of cosmic salvation.

Conclusion

Roman Catholic ecofeminist theology is a theology that takes Creation seriously. It is a theology that sees inclusiveness and interdependence, as modeled by the Holy Trinity and Earth

---


itself, as the primary constitutive realities of the universe; therefore, God is seen as deeply embedded in, even embodied by, the whole of Creation, which is sacred. This belief is bolstered by a view of the Incarnation that sees Jesus taking on not just the \textit{sarx} of maleness or “human-ness,” but of a broad, all-loving, all-encompassing cosmic “creatureliness” that is redemptive for all Creation. Jesus’ cosmic Incarnation and his Earthy ministry of service, healing and liberation from oppression tell us that bodies matter. However, an ecofeminist critique of IVF reveals that this technology harms women’s bodies and ecosystems in a morally impermissible way. These harms derive from sexist and environmentally degrading social structures that favour divisive hierarchical dualisms between men and women and between humans and the rest of Creation; thus, they fail to reflect Christ’s all-inclusive, Incarnate love, and also hinder the concrete, embodied actualization of God’s reign of peace and justice which Jesus’ earthly mission inaugurated.

An ecofeminist analysis, therefore, ultimately supports the Roman Catholic magisterial teaching on the immorality of IVF. However, by focusing on the context in which IVF occurs, ecofeminism shifts the emphasis away from foetal and marital rights, to the health of women and ecosystems. This perspective requires that Roman Catholics work not only toward prohibiting IVF and all other manner of harmful technologies, but especially toward the building of equitable social, political and economic systems that uphold the goodness of all Creation; that empower women to make truly life-affirming choices for themselves and their communities; and that contribute to the liberation from oppression and sin, and to the realization of God’s Kingdom of peace and justice here on Earth.
Conclusion

IVF: Facts and Controversies

*In vitro* fertilization is a varied and medically intensive set of procedures that is intended to result in the creation of a child for persons who either cannot or do not wish to reproduce without assistance. A typical IVF cycle lasts several weeks and involves many rounds of medication and minor surgical procedures in order to stimulate ovulation, harvest and fertilize gametes, and transfer embryos. In Canada and the US, a single cycle of IVF may cost as much as $10,000 yet have less than a 50% chance of success. Because of the inherent nature of IVF treatments, women are the primary consumers of this technology, even when it is not medically indicated. Medical risks can vary from minor discomfort to fatality (rarely). Women often report treatments to be psychologically and physically exhausting; however, many women are highly motivated to continue even very painful treatments for as long as necessary to have a child.

IVF poses many medical, legal and ethical challenges, and since women are the primary consumers of IVF, they are especially at risk. The regulation and documentation of IVF treatments around the world are largely uncoordinated, which makes it difficult to enforce local laws and collect robust, standardized data about safety and efficacy, especially when medical tourism is involved. In addition, IVF has entered into routine practice with little to no preclinical trials, which many have argued is tantamount to human experimentation. Some studies have found no significant link between IVF and cancer or birth defects, while other authors and women IVF-users report a host of reproductive, neural, cardiac and visual problems in women and IVF-conceived children. There also exists no conclusive evidence for IVF’s cost-effectiveness or efficacy.
Emerging questions about parentage, donor and surrogate rights, unethical creation and disposal of embryos, and equitable access have not been resolved by the piece-meal regulation of IVF. Problems of funding and access also exist, and these are often tied to other socio-political questions of demographics, just distribution of medical resources, and expectations about family roles and structures. On a global scale, some authors have noted how these dilemmas often play out in racist ways such that people of colour have less access to IVF, but are more prone to be exploited as commercialized donors and “breeders.”

Christian theological concerns about IVF are especially influenced by the doctrine of Creation, which sees God as omnipotent ruler and creator, and affirms the sanctity of human life and human sexual expression within marriage. As a result, many Christians have found IVF to be morally problematic; major concerns include: the potential introduction of third parties into a married couple’s procreative act; the perceived “unnaturalness” of IVF that may be seen as an attempt to “play God,” or to destabilize family life; and threats to the embryo and resulting children from foetal reduction, birth defect, and immoral use or disposal of “spare” embryos. Even so, a number of denominations have condoned the use of IVF so long as it occurs between married spouses using their own gametes with no deliberate destruction of embryos.

The Roman Catholic magisterium has been especially vocal in its opposition to IVF, and Roman Catholic thinking on IVF is distinguished by the use of Natural Law and appeals to human dignity. These are the basis for the Roman Catholic teaching on the inseparability of the unitive and procreative aspects of sex; and since IVF separates these two aspects of sex and marriage, it is immoral. As such, the only licit means of procreation, which preserves the rights and dignity of parents and child, is through the loving sexual act within marriage. These two primary concerns—upholding the right to life of the embryo, and preserving the unitive and
procreative meanings of marriage—guide the magisterium’s teaching on all other reproductive technologies. However, these teachings have been met with a significant degree of dissent, and Roman Catholics are known to sometimes avail themselves of IVF in spite of Church teaching.

Methodologically, the magisterial position appeals to universalist and abstract principles and doctrines, and gives little to no explicit consideration of the role of women in IVF; this is reflected, e.g., by the apparently legalistic language employed by magisterial documents. The morality of IVF, therefore, depends on the technical procedure in relation to the universal Natural Law, and not on the particular people involved, their capacities or motivations, or their individual contexts. Feminist theologians, by contrast, have favoured ethical models centered on interpersonal relationships that value equality, mutuality, autonomy and relationality. In this context, feminist theologians have tended to view IVF and ARTs with suspicion, but without complete condemnation. However, IVF has not been a topic of major interest for many feminist theologians, and few have paid notice to the ecological implications of IVF. Two secular exceptions are Gaard and Corradi who are suspicious of the choice offered by ARTs and question the safety of these procedures for women’s health.427 To date there has not been a specifically theological ecofeminist response to IVF that can bring together the concerns of religious institutions and ecofeminists, and ground the work of secular ecofeminists in the Church’s tradition of Christ’s saving, loving and all-inclusive Incarnation.

**IVF and Ecofeminism**

Ecofeminist theory is based on the belief that the oppression of women and the oppression of other-than-human Nature ultimately stem from the same patriarchal and

---

hierarchical ideologies that legitimate relationships of domination between humans, and between humans and the environment. As a result, ecofeminists embrace an ethical model that challenges the “logic of domination” and values justice, respect, autonomy, community, holism and diversity. As such, ecofeminist ethics may be understood as primarily an ethics of care, motivated by the biblical precept of liberation for the oppressed, and informed by women’s own experiences. In bioethical dilemmas, ecofeminists stress the importance of healthy ecosystems as the primary component of good health, and criticize medical procedures and policies that do not take women’s and environmental health into consideration. Nonetheless, they have been reluctant to completely condemn any particular procedure.

IVF can support ecofeminist bioethical principles insofar as it aims to promote human health, to increase women’s reproductive freedom and to promote the importance of childbearing to the whole community. Some feminists also welcome IVF as liberatory for women by offering them more control over the timing and circumstances of their reproductive choices. However, others view IVF with suspicion, skeptical of the quality of choices offered by IVF. ART-critical feminists discuss IVF in terms of power politics and argue that IVF is a continuation of the sexist, racist and classist techno-medical control of women’s bodies evident in obstetric medicine, global population control policies and the underlying philosophy of the Western scientific method.

Women’s and environmental concerns, therefore, intersect in IVF on at least four points. Firstly, the medicalization and privatization of reproduction in IVF politically disenfranchises women by masking the important environmental factors that may contribute to infertility. Because infertility is seen as a private matter of genetics and personal health, rather than a systemic problem – e.g., of poor nutrition or exposure to environmental toxins – women are
paradoxically made to feel that the problem of infertility is their own fault, yet they are unable to
do anything about it without the intervention of a medical expert. The ecological implication is
that IVF’s ability to mask the effects of environmental toxins on human reproductive health can
also mask the effect of these same toxins on reproductive health within ecosystems.

Secondly, IVF is a costly and resource-intensive procedure, but its cost-effectiveness has
not been demonstrated, and there is little discussion about the sustainability of this technology. It
is often claimed as a right, regardless of cost and despite the fact that humans already over-
consume the Earth’s finite resources at a rate far beyond what is estimated to be sustainable and
equitable. This vast use of resources, with too little regard for efficiency or waste, therefore
appears to mimic the general pattern of mass consumption and consumerism prevalent in
Western societies.

Furthermore, the fertility drugs inherent to IVF have been linked to a variety of ailments,
ranging from nausea to death, and various developmental and reproductive problems in wildlife.
Although human health studies have been inconclusive, many researchers have demonstrated a
lack of sympathy for women’s health concerns, approaching IVF with a “wait-and-see”
methodology that waits for health complications to become statistically significant before
warranting action. However, much of this needed research never occurs, meaning that women’s
bodies and ecosystems continue to be polluted by IVF drugs with little public concern.

Finally, the compartmentalization and commodification of women’s bodies in IVF
reflects the same patriarchal values that have contributed to the current environmental crisis.
Both of these problems stem from a philosophy of alienation. In IVF, this alienation is seen in:
the way that women become alienated from their bodies in order to cope with the pain of
treatment; the way that the commercialization of gametes and surrogacy alienates people from
their reproductive capacities; unequal power dynamics between doctor and patient; or in eugenic assumptions about embryo “quality control.” IVF therefore becomes intimately linked to the environmental crisis as it supports an oppressive system of hierarchical alienation where man and mind are valorized over woman, body and Nature.

IVF thus seriously conflicts with ecofeminist bioethical principles. It fails to respect women and the other-than-human when they are physically, emotionally and spiritually harmed by this technology. IVF promotes relationships of injustice and a fragmented view of humanity and the other-than-human when it endorses the super-consumption of affluent medical consumers and the use of disenfranchised women as reproductive labour. The needs of communities are ignored by the individualistic framework of IVF, and this serves to diminish both genetic diversity and the acceptance of genuinely diverse life choices. Finally, IVF reduces women’s autonomy by superficially catering to the notion of “choice” without questioning the quality of choice afforded by IVF, or the social structures which influence such choices.

**Ethical and Theological Implications**

Roman Catholic ecofeminist theology is a theology that takes Creation seriously. It is a theology that sees inclusiveness and interdependence, as modeled by the Holy Trinity and Earth itself, as the primary constitutive realities of the universe; therefore, God is seen as deeply embedded in, even embodied by, the whole of Creation, which is sacred. This belief is bolstered by a view of the Incarnation that sees Jesus taking on not just the *sarx* of maleness or “human-ness,” but of a broad, all-loving, all-encompassing cosmic “creatureliness” that is redemptive for all Creation. Jesus’ cosmic Incarnation and his Earthy ministry of service, healing and liberation from oppression tell us that bodies matter. Thus, an ecofeminist critique of IVF reveals that this
technology harms women’s bodies and ecosystems in a morally impermissible way. These harms derive from sexist and environmentally degrading social structures that favour divisive hierarchical dualisms between men and women and between humans and the rest of Creation; therefore, they fail to reflect Christ’s all-inclusive, incarnate love, and also hinder the concrete, embodied actualization of God’s reign of peace and justice which Jesus’ earthly mission inaugurated.

An ecofeminist analysis, then, ultimately supports the Roman Catholic magisterial teaching on the immorality of IVF. However, by focusing on the context in which IVF occurs, ecofeminism shifts the emphasis away from foetal and marital rights, to the health of women and ecosystems. This perspective requires that Roman Catholics work not only toward prohibiting IVF and other harmful technologies, but also toward the building of equitable social, political and economic systems that uphold the goodness of all Creation; that empower women to make truly life-affirming choices for themselves and their communities; and that contribute to the liberation from oppression and sin, and to the realization of God’s Kingdom of peace and justice here on Earth.

Avenues for further research include women’s issues that have been socially and politically controversial, such as abortion. An ecofeminist focus on women’s and environmental holistic health could help end the current stalemate between adversarial arguments based on the foetal right to life and women’s right to reproductive choice. Other controversial reproductive technologies related to IVF, such as or ectogenesis or cloning, are also in need of an ecofeminist analysis. In many cases, ecofeminist bioethics strengthens already-established Church teaching on these issues; in other cases, such as GIFT or embryo donation, an ecofeminist approach can offer a fresh perspective and help clarify issues on which the magisterium has not yet spoken
decisively, or where there has been a significant amount of dissent. Finally, topics that have been of particular interest to secular ecofeminists, e.g., childbirth or animal welfare, could be a rich research area for Roman Catholic ecofeminists as they seek to ground these issues in a “horizon of ultimacy”\footnote{Lisa Sowle Cahill, “Genetics, Ethics and Feminist Theology: Some Recent Directions,” \textit{Journal of Feminist Studies in Religion} 18, no. 2 (2002), 58.} not available to secular analyses. In all these cases, the thesis presents a challenge to the Church to integrate its bioethical teaching more fully with its belief in the God-given dignity of women and all Creation, and also encourages bioethicists—as well as medical practitioners, policy-makers, and consumers—to pay attention to the specific contexts in which IVF and all ethical issues occur.


Ehrlich, Shelley, Paige L. Williams, Stacey A. Missmer, Jodi A. Flaws, Xiaoyun Ye, Antonia M. Calafat, John C. Petrozza, Diane Wright, and Russ Hauser. “Urinary


Mascarenhas, Maya N., Hoiwan Cheung, Colin D. Mathers, and Gretchen A. Stevens. “Measuring Infertility in Populations: Constructing a Standard Definition for use


Pius XII. “Iis qui interfuerunt conventui decimo nationali a societate italica de chirurgia plastica romam indiicto.” *Acta Apostolicae Sedis* XXV, series II, annus L (October 4 1958): 952-61.


Monographs and Webpages


Surrogate Motherhood - Ethical Or Commercial. New Delhi: Centre for Social Research, 2013.


