brought to you by I CORE

**DE GRUYTER** 

IIPT 2017: 21(2): 291-314

#### **Research Report**

Neil Messer\*

# **Bioethics and Practical Theology: The Example of Reproductive Medicine**

https://doi.org/10.1515/ijpt-2017-0029

**Abstract:** This report begins by introducing bioethics, outlining the history and present shape of the field, and making some brief remarks about its methods and approaches. The interactions of theology and religion with bioethics are briefly surveyed, and potential points of contact with practical theology are identified. Next, the ethics of reproductive medicine, in particular in vitro fertilisation (IVF), is used as a specific example of theological reflection on bioethics. The final section identifies some questions arising from this example, which may contribute to a research agenda in bioethics and practical theology.

**Keywords:** Theological ethics, bioethics, reproductive medicine, in vitro fertilisation

Zusammenfassung: Dieser Bericht beginnt mit der Einführung in die Bioethik und stellt zunächst die Geschichte und heutigen Konturen dieses Bereichs vor. Seine Methoden und Zugänge werden andiskutiert. Die Wechselwirkungen zwischen Theologie, Religion und Bioethik werden inspiziert und mögliche Anschlußstellen für die praktische Theologie identifiziert. Anschließend wird die Ethik der Reproduktionsmedizin, insbesondere hinsichtlich der In-vitro-Fertilisation (IVF), als konkretes Beispiel theologischer Überlegung zur Bioethik entfaltet. Im letzten Teil werden einige Fragen ermittelt, die sich aus diesem Beispiel ergeben, und die zu einem Forschungsprogramm in Bioethik und praktischer Theologie beitragen

Stichwörter: Theologische Ethik, Bioethik, Reproduktionsmedizin, In-vitro-Fertilisation

<sup>\*</sup>Corresponding author: Neil Messer, University of Winchester - Department of Theology, Religion and Philosophy, Sparkford Road, Winchester SO22 4NR, UK,

#### Introduction: what is bioethics?

In many industrialised countries, the late 1960s and early 1970s were a time of rapid scientific and technological advance in medicine, and the development of new high-tech treatments was increasingly posing new ethical dilemmas (or sometimes new forms of older dilemmas). For example, should everyone who could be kept alive technologically have their lives maintained in this way? Indeed, what was meant by patients being "alive" or "dead," in situations where their vital functions were not self-sustaining but were maintained artificially? How should scarce life-saving treatments be allocated amongst those who needed them? At the same time, there was a growing awareness of the abuses that had recently taken place in the name of biomedical research. Later in the 1970s, developments in reproductive medicine and human genetics began to make possible unprecedented kinds of technological intervention in the origins and development of individual human lives. Practical ethical questions about whether these techniques should be used, to whom they should be available and for what purposes, were underpinned by deeper concerns that this kind of technological control over human procreation might in itself be in some way dehumanising or threatening to human dignity.

In this context of rapid medical and scientific change, and the ethical puzzles it generated, the discipline of bioethics was born. It began its life in the United States, and though it has since grown into a major global academic industry, it is probably true to say that the shape and character of the discipline continue to be defined more by a North American context than any other. Like theology, it is a discipline that has several intersecting "publics" (to use David Tracy's term): not only the academy, but also health care professionals and institutions, those who make and implement law and public policy, patients and their families, and indeed the wider society as it becomes engaged with questions of law, policy, professional practice and moral values in relation to these topics.

Definitions of bioethics vary, and some authors try to distinguish between "bioethics" and related terms like "medical ethics" or "health care ethics." However, in practice these distinctions do not amount to very much, and it is reasonably accurate to think of "bioethics" as naming the full range of ethical issues and concerns raised by health care, the biosciences and biotechnology. The predominant focus is usually on human applications: the ethics of human medicine, research involving human participants, the use of technologies to treat human

<sup>1</sup> Albert R. Jonsen, "A History of Religion and Bioethics," in Handbook of Bioethics and Religion, ed. David E. Guinn (Oxford: Oxford University Press, 2006), 23-35 (24).

diseases or modify human nature, and so forth. However, it can also include consideration of other living species – for example, the ethics of animal research, and plant and animal biotechnology – and so, within the terrain of practical ethics, bioethics shares some territory with other fields such as animal and environmental ethics.2

This Research Report will offer a brief and selective survey of how bioethics is done and how religion and theology engage with it. I shall suggest some of the ways in which it might be of interest to practical theologians, and outline some possibilities for practical theological engagement with bioethical reflection. In order to keep the discussion within manageable bounds, one particular area of bioethical debate will be used as the main focus. Since the birth in 1978 of Louise Brown, the first baby conceived by in vitro fertilisation (IVF), reproductive medicine and related areas such as human genetics have been a major preoccupation of bioethics. The ethics of reproductive medicine and genetics have also attracted considerable attention from religious communities and their theologians - not surprisingly, since these areas of science, medicine and ethical debate open up deep questions about aspects of human life such as sexuality, marriage, family life, parenthood, kinship and personal and social identity. This area of bioethics, therefore, offers informative examples of ways in which practical theology might interact with bioethics and religion. As a preliminary to these specific examples. however, some more general methodological remarks might be helpful.

#### How bioethics is done

How is bioethics done? The short answer is: in many diverse and disparate ways. Some authors base their bioethics on particular philosophical theories of ethics, others seek approaches that synthesise insights from different theories or identify common ground between them. Some adopt a framework of guiding principles, some argue for virtue and character-based approaches, some for a feminist ethic of care, while others recommend forms of casuistry that work upwards and outwards from specific cases rather than downwards from overarching theories or general principles.<sup>3</sup> Within this diverse mix of theories and methods, two dominant forms of bioethical argument are consequentialist (especially utilitarian) and

<sup>2</sup> For a representative overview of the field, see Bonnie Steinbock, ed., The Oxford Handbook of Bioethics (Oxford: Oxford University Press, 2009).

<sup>3</sup> For a survey of methods and approaches, see James F. Childress, "Methods in Bioethics," in The Oxford Handbook of Bioethics, ed. Steinbock, 15-44.

autonomy-based. As will become clear, religious and theological approaches to bioethics may be rather critical of both.

Utilitarian theories come in many forms. One common feature is that they are consequentialist: their basic standard for any moral judgement is not conformity to duty or the virtuous character of the agent, but the consequences of one's actions. Moral agents should seek to bring about the best consequences, but different theories adopt differing criteria for assessing the goodness or badness of consequences. Owing to the long-standing influence of Peter Singer, preference utilitarianism, whose central criterion is to maximise satisfaction of the preferences of all concerned, has had a particularly high profile in bioethics.<sup>4</sup> Other utilitarian approaches to bioethics may use different criteria such as pleasure and the absence of pain,<sup>5</sup> or may argue in more general terms about maximising benefit and minimising harm.

Other bioethical approaches are based, not on consequentialist calculations, but on action-guiding moral principles that can be applied to specific decisions and dilemmas. Among such principles, respect for autonomy has a particularly wide currency. It is one of the four principles which make up the highly influential framework developed by Tom Beauchamp and James Childress, but autonomy-based arguments are also used by many authors who do not explicitly follow the four-principles approach. The general claim here is that people's autonomous choices and wishes should be respected: for example, their consent to or refusal of medical treatment, their decision to participate (or not) in clinical research, and so forth. Questions that then arise include the limits of autonomous choice (for example, must an autonomously-expressed wish for active euthanasia be honoured?), the conditions for decisions to be truly autonomous (for example, how

**<sup>4</sup>** Peter Singer, *Practical Ethics* (3<sup>rd</sup> ed., Cambridge: Cambridge University Press, 2011). Note that it is not only human beings who have preferences, an observation which underpins Singer's critique of 'speciesism' and his equally influential work in animal ethics.

**<sup>5</sup>** This twofold standard was of course the classical utilitarian criterion proposed by Jeremy Bentham in his *Introduction to the Principles of Morals and Legislation* (New York: Hafner, 1948 [1781]).

**<sup>6</sup>** Tom L. Beauchamp and James F. Childress, *Principles of Biomedical Ethics* (7<sup>th</sup> ed., New York: Oxford University Press, 2012). The four principles in Beauchamp and Childress' framework are: respect for autonomy, non-maleficence (not doing harm), beneficence (doing good), and justice. These are described as *prima facie* principles, which may need to be balanced against one another in resolving concrete issues: for example, respect for autonomy may be in tension with beneficence if a patient chooses to refuse a beneficial treatment. They may also need to be specified into more narrowly focused rules in order to guide action in specific situations: for example, respect for autonomy generates the rule requiring patients' informed consent for treatment or participation in clinical research.

free from coercion and how well-informed must they be?), how to define and assess a person's capacity for autonomous decision-making, and how decisions should be made for individuals who lack that capacity (such as infants, unconscious patients or those with advanced dementia). The concept of autonomy has philosophical roots in the thought of both Kant and Mill, and according to some critics this hybrid ancestry can give autonomy-based arguments in bioethics a rather incoherent or protean character.7 Autonomy-based ethics has been criticised on other grounds too, for example by feminists who consider standard views of autonomy to be overly individualist and insufficiently relational. Not all its critics wish to reject it altogether as an ethical concept: for example, Onora O'Neill has argued that bioethical argument would be more coherent and robust if its concept of autonomy were more Kantian,<sup>8</sup> and some feminist scholars advocate a modified kind of "relational autonomy."9

## Religion, theology and bioethics

According to Albert Jonsen, the standard narrative about religion and bioethics is that "[b]ioethics began in religion, but religion has faded from bioethics." In other words, many of the early leaders of the field were theologians from various traditions, but nowadays it is much less common for bioethicists to be theologically trained, and religious perspectives are often marginalised in the bioethical literature. Jonsen himself does not wholly concur with this narrative;<sup>11</sup> in any event, whatever the place of religion in bioethics in general, there is an extensive theological literature exploring bioethical issues from the perspectives of various faith traditions. As a Christian theologian, I shall confine myself in this report to approaches grounded in Christian traditions, 12 but even within Christian bioethics

<sup>7</sup> Onora O'Neill, Autonomy and Trust in Bioethics (Cambridge: Cambridge University Press, 2002); Mark Bratton, "Anorexia, Welfare, and the Varieties of Autonomy," Philosophy, Psychiatry and Psychology 17, no. 2 (2010), 159–62; Neil Messer, Respecting Life: Theology and Bioethics (London: SCM, 2011), 213-9.

<sup>8</sup> See O'Neill, Autonomy and Trust, 73–95.

<sup>9</sup> Catriona Mackenzie and Natalie Stoljar, eds., Relational Autonomy: Feminist Perspectives on Autonomy, Agency and the Social Self (Oxford: Oxford University Press, 2000).

<sup>10</sup> Jonsen, "A History of Religion and Bioethics," 23.

<sup>11</sup> Ibid., 33-35.

<sup>12</sup> For a variety of Jewish approaches from different traditions see, e.g., Yechiel Michael Barilan, Jewish Bioethics: Rabbinic Law and Theology in Their Social and Historical Contexts (Cambridge: Cambridge University Press, 2014), Jonathan K. Crane, Narratives and Jewish Bioethics (New York: Palgrave Macmillan, 2013), Elliott N. Dorff and Jonathan K. Crane (eds.), The Oxford Handbook of

there is tremendous diversity.<sup>13</sup> This can be expressed, in a very generalised and thematic way, in terms of the familiar "quadrilateral" of theological sources: Scripture, tradition, reason and experience.<sup>14</sup> Christian bioethicists vary widely, not only in the relative weight they give to each source and how they relate the sources to each other, but also in how each is understood and used.

How are the ancient texts of *Scripture*, for example, brought to bear on the very modern problems of bioethics? Some authors are rather doubtful that this can be done to any great extent, beyond shaping a Christian vision of the world and human life, which might then give general guidance and direction to reflection on specific bioethical problems. 15 Others adopt hermeneutical strategies that allow for creative and imaginative connections between biblical texts, narratives and themes and contemporary bioethical debates.<sup>16</sup>

Traditions of faith, reflection and practice play some part in most or all Christian bioethics, but there is wide variation in what is understood by 'tradition' and how it functions in bioethical work. To give one example, Catholic magisterial teaching appeals to both reason and revelation, such that "faith and reason 'mutually support each other';"17 it is done self-consciously in continuity with the prior history of church teaching, said to be authoritative for the faithful,18 and

Jewish Ethics and Morality (Oxford: Oxford University Press, 2012) and Aaron L. Mackler, Introduction to Jewish and Catholic Bioethics: A Comparative Analysis (Washington, DC: Georgetown University Press, 2003); and for examples of Islamic approaches, see Nathan E. Brockopp and Thomas Eich (eds.), Muslim Medical Ethics: From Theory to Practice (Columbia, SC: University of South Carolina Press, 2008) and Abdulaziz Sachedina, Islamic Biomedical Ethics: Principles and Application (Oxford: Oxford University Press, 2009). Examples of bioethical reflection from other religious traditions can be found in (e.g.) Guinn, Handbook of Bioethics and Religion, ed. H. Tristram Engelhardt, Jr., Global Bioethics: The Collapse of Consensus (Salem, MA: M & M Scrivener Press, 2006) and eds. G. Pfleiderer et al., GenEthics and Religion (Basel: Karger, 2010).

<sup>13</sup> For a comprehensive collection of Christian approaches and perspectives, see eds. M. Therese Lysaught et al., On Moral Medicine: Theological Perspectives on Medical Ethics (3rd ed., Grand Rapids: Eerdmans, 2012).

<sup>14</sup> Discussed, e.g., by Richard B. Hays, The Moral Vision of the New Testament: Community, Cross, New Creation (Edinburgh: T & T Clark, 1997), 209-11, 295-8.

<sup>15</sup> E.g. Tom Deidun, "The Bible and Christian Ethics," in Christian Ethics: An Introduction, ed. Bernard Hoose (London: Continuum, 1998), 3-46.

<sup>16</sup> E.g. Allen Verhey, Reading the Bible in the Strange World of Medicine (Grand Rapids: Eerdmans, 2003), 32-67.

<sup>17</sup> John Paul II, Encyclical Letter Fides et Ratio (14 September 1998), no. 100, quoting First Vatican Council, Dogmatic Constitution on the Catholic Faith Dei Filius, no. 4. Online at http://w2. vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\_jp-ii\_enc\_14091998\_fides-et-ra tio.html (accessed 23 August 2017).

<sup>18</sup> The nature of this authority, though, is complex and sometimes contested among Catholic ethicists. For an account of the various levels of authority that may be attributed to different forms

often explicitly addressed to all people of goodwill. In a different way, Orthodox bioethics is profoundly shaped by a theological and spiritual tradition that begins with the Scriptures and continues through the theologians and councils of the Church, particularly the undivided Church of the Patristic era. Also, however, Orthodox bioethicists often emphasise that the primary locus of bioethical reflection and action is the believer's life of prayer and ascetic discipline.<sup>19</sup>

Reason, of course, is in some sense a part of any Christian bioethical argument, but different Christian traditions vary in their views of the powers and limits of human moral reasoning. The (predominantly Catholic) natural law tradition. for all the wide variety of ways it is understood in contemporary moral theology, expresses a confidence in the capacity of human creaturely reason to discern what is good and right, and in the basic harmony of reason with faith.<sup>20</sup> This is part of what underpins the appeal in magisterial teaching to reason as well as the sources of revelation. Many Protestant bioethicists, by contrast, would have a keener sense of the limitations placed on human reason both by our creaturely finitude and our sin, and would emphasise the importance of revelation for an authentically Christian bioethics.21

Experience features in Christian bioethical reasoning in a wide variety of ways. For example (as we shall see), patients' experiences of their needs and suffering sometimes appear to be in tension with bioethical norms drawn from Scripture or natural law, and questions then arise about how insights from Scripture, natural law and experience ought to question or challenge each other. Or again, some approaches to Christian bioethics call for particular attention to experiences of oppression and marginalisation, to draw attention to the ways in which patriarchy, racism or economic oppression may distort bioethical and theological thinking.22

of magisterial teaching, see Benedict M. Ashley, Jean K. DuBlois and Kevin D. O'Rourke, Health Care Ethics: A Catholic Theological Analysis (5th ed., Washington, DC: Georgetown University Press, 2006), 19-30. For a critical perspective on this view of magisterial authority see James F. Drane, A Liberal Catholic Bioethics (Berlin: Lit Verlag, 2010), e.g. 115-29.

<sup>19</sup> See John Breck, The Sacred Gift of Life: Orthodox Christianity and Bioethics (Crestwood: St Vladimir's Seminary Press, 1998), 19–53. In the emphasis on the central role of the believer's life of spiritual discipline in theological and moral discernment, there is a point of contact with a recent proposal for Orthodox practical theology: Razvan Porumb, "An Orthodox Model of Practical/Pastoral Theology," International Journal of Practical Theology 21, no. 1 (2017), 127–54.

<sup>20</sup> Cf. John Paul II, Fides et Ratio, no. 100.

**<sup>21</sup>** See further Messer, *Respecting Life*, ch. 1.

<sup>22</sup> See the range of readings collected in Lysaught et al., On Moral Medicine, ch. 2.

## Bioethics and practical theology

In a general sense, almost all bioethical reflection, whether theological or not, has a practical orientation, but it is necessary to be a little more specific about the kinds of questions bioethics might raise for practical theology. The latter is a notoriously diverse and contested field, understood in different ways in different places and contexts.<sup>23</sup> Bonnie Miller-McLemore describes it in a fourfold way: as an "activity" of believers, a "method" of theological analysis, a "curricular area" focusing on the practice of ministry and an "academic discipline" supporting and reflecting on the first three aspects.<sup>24</sup> To identify some of the respects in which bioethics might interest scholars practising the academic discipline, each of the other three aspects identified by Miller-McLemore will be relevant, though perhaps the starting point should be the "activity of believers seeking to sustain a life of reflective faith in the everyday."25

For many such believers, lives of reflective faith will involve decisions and actions that bear on bioethical questions. For example, people deciding what healthcare provision to make for themselves and their dependents will be positioning themselves, whether they know it or not, in relation to bioethical questions about healthcare resource allocation. Intending parents struggling to conceive or facing the risk that their child will inherit a genetic disease, patients making choices about their own treatment when they learn that they have a terminal illness, those who must make decisions for a parent with advanced dementia, and many others besides, find themselves in life situations which may not only have profound personal and pastoral salience, but also inescapably raise bioethical questions for them. Moreover, many believers are health care professionals whose lives of reflective faith inevitably call for ethical reflection on their professional practice in the light of their faith.

Bioethical questions are therefore also a concern of those who practise Christian ministry in church, healthcare chaplaincy or other contexts. How should pastoral caregivers support believers who have to face bioethical questions in their own lives? How should the liturgical practices of Christian communities inform, and be informed by, bioethical questions? How should preachers

<sup>23</sup> Cf. Bonnie J. Miller-McLemore, "Toward Greater Understanding," International Journal of Practical Theology 16, no. 1 (2012), 19-38. Once again, I shall confine my discussion to Christian practical theology.

<sup>24</sup> Bonnie J. Miller-McLemore, "Introduction: The Contributions of Practical Theology," in The Wiley-Blackwell Companion to Practical Theology, ed. Bonnie J. Miller-McLemore (Chichester: Wiley-Blackwell, 2012), 1–20 (5).

<sup>25</sup> Miller-McLemore, "The Contributions of Practical Theology," 5.

address bioethical concerns in their proclamation of the Gospel? How should Christian educators equip both young people and adults to address such questions in the context of their faith? Christian bioethical reflection therefore has a bearing on practical theology as the "curricular area" concerned with training and equipping people for such Christian ministries. And methodological questions also arise: how should bioethical reasoning inform, and be informed by, practical theological reflection on Christian life and experience?

Much of the bioethical reflection produced by Christian churches, and much of the academic literature produced by Christian bioethicists, is addressed to one or more of these concerns: it may be intended to guide believers in their ethical practice and decision-making, or to guide the practice of pastoral care when bioethical questions arise, or to resource the training of pastors, preachers and teachers. Yet there are often perceived tensions between Christian bioethics (as found in church teaching and theological literature) and pastoral experience. In vitro fertilisation, pre-implantation genetic diagnosis or physician-assisted suicide, for example, may sometimes appear the most compassionate responses to believers in particular kinds of need and trouble, yet might be discouraged or rejected by the teaching of those people's churches. So further methodological questions arise about how such tensions between lived experience, pastoral practice and ethical reasoning should be negotiated; how might practical theological reflection on Christian life and experience question – and be questioned by – the bioethical reflection of theological ethicists and churches?

Moreover, in addition to these aspects of practical theology, the emphasis by Elaine Graham and others on the connections between practical and public theology is particularly relevant to theological reflection on bioethics.<sup>26</sup> Both Christian bioethics and practical theology relate in various ways to David Tracy's three "publics" of church, academy and society. Church and academy have already been touched on; in considering society we should also have in view its public institutions, particularly healthcare institutions and professional communities. Individual bioethical decisions made by patients, professionals or others interact with these publics in various ways. They are almost always constrained by legal or regulatory frameworks, professional standards or institutional rules and practices. Yet individual decisions or cases may play a part in shaping and changing such frameworks, standards and practices. Believers who are health care professionals must work within institutions and will be bound by codes of

<sup>26</sup> Elaine Graham, "Why Practical Theology Must Go Public," Practical Theology 1, no. 1 (2008), 11-17; see also Elaine Graham and Anna Rowlands, eds., Pathways to the Public Square: Practical Theology in an Age of Pluralism (Münster: Lit Verlag, 2005).

professional ethics; yet they may find themselves called to shape and perhaps challenge aspects of their institutions' practices or their professions' ethical codes. Both academic literature and church teaching concerning Christian bioethics are therefore addressed to the "public" of society and its institutions, as well as church and academy. For this reason, further methodological questions arise: for example, when theological bioethicists or church leaders address their arguments and conclusions to society and its healthcare institutions, what can they legitimately aim to achieve, and how should they go about it?<sup>27</sup>

The final section of this report will suggest more fully some of the questions that might arise out of these various interactions between bioethics and practical theology. However, before doing so, it is necessary to make an account that has thus far been rather abstract and general more concrete and specific. In the next section, therefore, I shall discuss one particular issue from the field of reproductive medicine, as an example that can give a more specific focus to what has been said so far about Christian bioethics and practical theology.

## In vitro fertilisation and reproductive autonomy

During the lifetime of the discipline of bioethics, reproductive medicine has burgeoned, and has become a major focus of attention for bioethicists. It includes many techniques for assisting, manipulating and and intervening in the processes of human reproduction, and is linked to related areas of medical and scientific practice such as clinical genetics. From this wide range of technical practices, I shall focus mainly on in vitro fertilisation (IVF), which for the purpose of this report has the advantage of being long-established enough to have attracted a substantial body of ethical reflection from religious and secular bioethicists.

Originally developed to treat infertility caused by damaged or absent fallopian tubes, IVF is now used for a wider range of indications.<sup>28</sup> A woman undergoing IVF is first given hormone treatment to hyper-stimulate her ovaries, so that they release more egg cells than they would in a normal monthly cycle, and the

<sup>27</sup> For an in-depth study of these questions in one particular context, see Kathryn Pritchard, Bioethics, Public Policy and the Church of England (unpublished PhD dissertation, University of Winchester, 2015).

<sup>28</sup> For further information on the following account, see Community of Protestant Churches in Europe (CPCE), "Before I Formed You in the Womb...": A Guide to the Ethics of Reproductive Medicine from the Council of the Community of Protestant Churches in Europe (Vienna: CPCE, 2017), 75-77 and references therein. Available online at http://cpce-repro-ethics.eu/ (accessed 12 September 2017).

egg cells are then retrieved by a surgical procedure. They are mixed with sperm in the laboratory, and if viable embryos are generated, they are transferred into the woman's womb. IVF may be "homologous," if the eggs and sperm come from the partners in a heterosexual couple, who also intend to be the social parents of the resulting child, or "heterologous," if eggs or sperm are donated by others.<sup>29</sup> If more viable embryos result than are needed for transfer, those which appear healthiest are transferred. Depending on the laws in force where the procedure is done, surplus embryos may be cryopreserved (stored frozen) for use in future treatment cycles, donated to other intending parents, used in research or discarded. Most jurisdictions that permit IVF and cryopreservation limit the time for which frozen embryos may be stored, after which any that have not been used in one of the permitted ways must be destroyed. Success rates vary widely depending on a number of factors, but in general success is far from assured for any woman undergoing IVF.30 Many of these features of IVF have attracted ethical reflection and concern.

One practical ethical question is who should have access to fertility treatments, either publicly or privately funded. When IVF was first developed, it was widely assumed that the beneficiaries would be married heterosexual couples who could not conceive. However, heterologous IVF (together with surrogacy, in some cases) makes it technically possible for those in same-sex relationships and single people to have genetically-related children. Some jurisdictions still only permit IVF for heterosexual couples, but in others it is available also to same-sex couples, and in some to single women. These shifts are complexly related to broader societal changes in patterns of sexual relationship, parenthood and family life over the decades since the invention of IVF. Another area of ethical discussion concerns the risks associated with IVF. This includes questions about whether IVF children are at any increased risk of birth defects or health problems, but also about the effects on their sense of identity and psychological wellbeing that might follow from knowing that their origins lay in homologous or heterologous IVF. Feminists and others also raise critical questions about the impact of the treatment on intending parents, particularly on women, for whom IVF entails

<sup>29</sup> A further possibility is surrogacy, in which the child is gestated by a woman other than the one who will act as the child's mother after his or her birth. Surrogacy raises further ethical and legal complexities, which are beyond the scope of this report. For a discussion, see CPCE, "Before I Formed You in the Womb...", ch. 7.

<sup>30</sup> For further information on these aspects of IVF, see CPCE, "Before I Formed You in the Womb...", 75-77, 88-91.

a series of burdensome and intrusive procedures with more than minimal health risks.31

One influential paradigm for the bioethical analysis of such questions is reproductive autonomy, which builds on the idea of respect for autonomy described earlier. In general reproductive autonomy asserts the right of individuals to make their own reproductive choices. However, there are divergent views about whether this should be understood primarily as a negative right, safeguarding individuals' procreative freedom and protecting them from interference with it, or also as a positive right giving them a claim on the assistance of others to fulfil their procreative aims (for example, through publicly funded reproductive medicine).<sup>32</sup> Feminist concerns, noted earlier, about the overly individualistic character of standard versions of autonomy also come into play here.

## **Technology, sex and procreation**

Christian bioethical reflection on IVF may engage with some or all of these questions and concerns, but also includes issues less frequently found in the secular literature, and often adopts a critical stance towards dominant secular approaches such as reproductive autonomy. This is perhaps most obvious in official Catholic teaching and the work of Catholic moral theologians. The Catholic Magisterium rejects IVF because it breaks the link between sex and procreation. The Instruction *Donum Vitae* appeals to both natural law and revelation to argue for the "inseparable connection" between the "unitive" and "procreative" meanings of the sexual act: sexual intercourse joins husband and wife in a loving union and is the means by which they co-operate with the Creator to generate new lives.<sup>33</sup> Conception by technological means such as IVF separates these two meanings, depriving the sexual relationship of "its proper perfection." <sup>34</sup> This is seen as a form of technological domination over human life, exceeding proper human dominion and undermining the dignity of the resulting child by "reducing him to

<sup>31</sup> For discussion of these and other issues, see CPCE, "Before I Formed You in the Womb...", ch. 4; for feminist critiques, see Lisa Sowle Cahill, Sex, Gender and Christian Ethics (Cambridge: Cambridge University Press, 1996), 243-6.

**<sup>32</sup>** See further CPCE, "Before I Formed You in the Womb...", 26f., 57–61.

<sup>33</sup> Congregation for the Doctrine of the Faith, Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation: Replies to Certain Questions of the Day (Donum Vitae) (22 February 1987), II.B.4 (a). Online at http://www.vatican.va/roman\_curia/congregations/cfaith/docu ments/rc\_con\_cfaith\_doc\_19870222\_respect-for-human-life\_en.html (accessed 23 August 2017).

<sup>34</sup> Donum Vitae II.B.5.

an object of scientific technology."35 The Instruction raises further objections to IVF: one is that it is associated with the destruction of human embryos, which in magisterial teaching are to be treated as human persons, worthy of the moral regard owed to all persons, from conception onwards.<sup>36</sup> Another is that sperm is often obtained by masturbation, which magisterial teaching prohibits.<sup>37</sup> Heterologous IVF is subject to the further objection that it introduces a third party into the process, damaging the unity of the marriage and family and confusing the identity of the child.38

Much of the scholarly literature by Catholic bioethicists explicates and defends this magisterial teaching,<sup>39</sup> but a number of Catholic authors defend some uses of IVF. The majority of these, such as Lisa Sowle Cahill, distinguish between homologous and heterologous cases. 40 Drawing on the concept, derived from the Second Vatican Council, of "the human person integrally and adequately considered,"41 Cahill is critical of *Donum Vitae* for (among other things) asserting that each sexual act in a marriage must unite unitive and procreative goods, and failing to acknowledge sufficiently the moral differences between homologous and heterologous IVF.42 A smaller number of Catholic authors go further and argue that it may also be legitimate to use donated gametes from third parties. 43

The relationship between church teaching and the practice of Catholic believers and communities is multifaceted. One specific practice proposed in response to magisterial teaching is the "adoption" or "rescue" of surplus embryos from fertility treatments: that is, the transfer of such embryos into the womb of a woman other than their genetic mother, with the aim that she will gestate them, bring them to birth and either rear them or give them up for post-natal adoption. Embryo adoption has been publicly advocated by some church leaders, but is a controversial practice and has been the subject of intricate argument among Catholic moral theologians. Some argue that it violates the integrity of marital procreation in a similar way to IVF, while others dispute this analysis and regard the practice as a legitimate means to protect the life of embryos otherwise

**<sup>35</sup>** *Donum Vitae* II.B.4 (c).

<sup>36</sup> Donum Vitae I.1, II (Introduction).

<sup>37</sup> Donum Vitae II.B.5, 6.

<sup>38</sup> Donum Vitae II.B.2.

**<sup>39</sup>** E.g. Ashley et al., *Health Care Ethics*, 86–89; William E. May, *Catholic Bioethics and the Gift of* Human Life (3rd ed., Huntington, IN: Our Sunday Visitor, 2013), ch. 3.

<sup>40</sup> Cahill, Sex, Gender and Christian Ethics, ch. 7. For other examples see Mackler, Jewish and Catholic Bioethics, 163-6.

<sup>41</sup> Cahill, Sex, Gender and Christian Ethics, 238.

**<sup>42</sup>** Cahill, Sex, Gender and Christian Ethics, 229–34.

<sup>43</sup> For examples see Mackler, Jewish and Catholic Bioethics, 172-4.

threatened with destruction. <sup>44</sup> A brief reference in the 2008 magisterial document *Dignitas Personae* expresses serious reservations but is not interpreted by all Catholic theologians as a definitive ruling against the practice. <sup>45</sup>

More broadly, how widely is magisterial teaching on IVF observed by the Catholic faithful? Sociological studies show that on related matters like artificial contraception, abortion and human embryo research, significant numbers of self-identified Catholics disagree with, and do not practice, church teaching. <sup>46</sup> Because Catholic teaching on areas related to reproductive medicine is so clearly stated and expected to be authoritative for the faithful, <sup>47</sup> it raises in a particularly sharp way the question of the relationship between the stated doctrinal and moral positions of institutional churches and the empirically discernible beliefs and practices of believers who identify themselves with those churches. To practical theologians interested in this relationship, the adherence of self-identified Catholics to magisterial teaching on IVF offers a fruitful area for investigation.

A further area of tension between magisterial teaching and practice can be seen in controversies over whether Catholic health care institutions should offer services that may be contrary to Catholic teaching in areas such as reproductive medicine.<sup>48</sup> These controversies can become particularly sharp when Catholic institutions contribute, or relate in some way, to a publicly-funded health care system governed by secular law and regulation that does not conform to Catholic teaching on these matters.

Among Protestants and Anglicans, ethical stances towards IVF are diverse. In somewhat similar vein to *Donum Vitae*, one concern voiced in the early days of IVF by Oliver O'Donovan, and later by Gilbert Meilaender, has to do with the

**<sup>44</sup>** For a cross-section of this debate, see eds. Sarah-Vaughan Brakman and Darlene Fozard Weaver, *The Ethics of Embryo Adoption and the Catholic Moral Tradition: Moral Arguments, Economic Reality and Social Analysis* (New York: Springer, 2007).

**<sup>45</sup>** Congregation for the Doctrine of the Faith, *Instruction* Dignitas Personae *on Certain Bioethical Questions* (2008), no. 19. Online at http://www.vatican.va/roman\_curia/congregations/cfaith/documents/rc\_con\_cfaith\_doc\_20081208\_dignitas-personae\_en.html (accessed 6 July 2017). See May, *Catholic Bioethics*, 113.

**<sup>46</sup>** E.g. Robin Gill, *Churchgoing and Christian Ethics* (Cambridge: Cambridge University Press, 1999), ch. 6; Jerome P. Baggett, *Sense of the Faithful: How American Catholics Live Their Faith* (Oxford: Oxford University Press, 2008); Christian Smith et al., *Young Catholic America: Emerging Adults In, Out of, and Gone from the Church* (Oxford: Oxford University Press, 2014).

<sup>47</sup> Though as noted earlier, the nature of that authority is complex and sometimes contested: see above n 18

**<sup>48</sup>** E.g. Maura Ryan, "The Delivery of Controversial Services," in *Handbook of Bioethics and Religion*, ed. Guinn, 385–99.

technological character of the procedure.<sup>49</sup> Both O'Donovan and Meilaender attach considerable importance to the form of biological kinship given in natural procreation within heterosexual marriage, in which the child is the progeny of a sexual relationship which has both unitive and procreative meanings. Their concern is that reproductive technologies which separate the unitive and procreative goods change the status of the resulting children from the fruit of the spouses' mutual self-giving love into the products of a technological project: "made" rather than "begotten," in the language O'Donovan borrows from the Nicene Creed.<sup>50</sup>

For both O'Donovan and Meilaender, this effectively rules out heterologous IVF and other such uses of donated gametes. As Meilaender puts it, "lines of kinship are confused, and the child produced cannot be said to represent [the spouses'] union in the flesh."51 He or she is instead a project, the outcome of an exercise of reason and will. Unlike Donum Vitae, O'Donovan and Meilaender stop short of stating categorically that homologous IVF is always wrong for the same reason: O'Donovan allows that it *could* be meant "not [as] the making of a baby apart from the sexual embrace, but the aiding of the sexual embrace to achieve its proper goal of fruitfulness."52 However, both are concerned that the use of IVF may result in the kind of cultural change they warn against. Here a second concern also raised by *Donum Vitae* comes into play, namely the association of IVF with the destruction of human embryos in research and the creation of "surplus" embryos that cannot be implanted. Both O'Donovan and Meilaender see the use and destruction of embryos as a sign of the technological mastery implicit in the meaning of reproductive technologies.<sup>53</sup>

A recent statement from the Community of Protestant Churches in Europe (CPCE), addressed to its member churches, ecumenical partners and a wider

<sup>49</sup> Oliver O'Donovan, Begotten or Made? (Oxford: Oxford University Press, 1984); Gilbert Meilaender, Bioethics: A Primer for Christians (3rd ed., Grand Rapids: Eerdmans, 2013), ch. 2. The first edition of Meilaender's book was published in 1996, around a decade after O'Donovan's.

<sup>50</sup> O'Donovan repeatedly emphasises that in raising such concerns he is not making claims about the aims or motivations of individual parents or clinicians, but about the wider cultural assumptions that accommodate and encourage such technological practices: e.g. Begotten or Made?, 64.

<sup>51</sup> Meilaender, Bioethics, 17; cf. O'Donovan, Begotten or Made?, ch. 4.

<sup>52</sup> O'Donovan, Begotten or Made?, 78. A similar position is developed more fully by Brent Waters, Reproductive Technology: Towards a Theology of Procreative Stewardship (London: Darton, Longman and Todd, 2001). Waters sets out a theological ethic of "procreative stewardship" in explicit opposition to the version of reproductive autonomy or "procreative liberty" proposed by John A. Robertson, Children of Choice: Freedom and the New Reproductive Technologies (Princeton, NJ: Princeton University Press, 1994).

<sup>53</sup> Ibid., 79f.; Meilaender, Bioethics, 20f.

public, welcomes IVF with fewer reservations.<sup>54</sup> The document sets out a Protestant ethical framework of love, justice, freedom and responsibility in the light of the Gospel; in this framework, some normative significance is attached to nature, but the natural-law reasoning underpinning *Donum Vitae*'s prohibition of IVF is rejected. Nor does the technological character of the procedure automatically rule it out, because technological interventions in nature can be seen as part of humanity's cultural mandate, signalled by biblical texts such as Gen. 2:15. The guide attributes some normative significance to the connections between love, sexuality and marriage, so that natural conception is to be preferred, but where this is impossible, "IVF fundamentally seems a legitimate alternative." This judgement applies both to homologous and heterologous IVF: no fundamental objections are levelled at gamete or even embryo donation, though various practical concerns are raised, particularly to do with the welfare and rights of the resulting children.<sup>56</sup> The document does not reach a conclusion on the status of the human embryo, acknowledging the ongoing disagreement within Protestant churches and indeed among its authors, though it does acknowledge that if embryonic life is seen as entitled to the same level of protection as any other human life, this may be "seen as a compelling argument against IVF."57

### The experience of IVF and social critique

A further set of concerns, informed among other things by feminist analyses, has to do with the experience of those undergoing IVF – particularly the experiences of women, on whom the physical and perhaps also psychological impact of the procedure disproportionately falls.<sup>58</sup> This is vividly illustrated by one woman's report, in an ethnographic study, of her experience after a failed IVF cycle: "After acknowledging that it was the worst experience of my life, I decided to do it again."59 Such reports suggest how strong the pain or loss of unwanted child-

**<sup>54</sup>** CPCE, "Before I Formed You in the Womb...", ch. 4.

<sup>55</sup> Ibid., 80.

<sup>56</sup> Ibid., 106-11.

<sup>57</sup> Ibid., 81.

<sup>58</sup> See Cahill, Sex, Gender and Christian Ethics, pp. 243-6. This is not of course to deny the psychological impact on intending fathers, nor indeed the financial costs to any intending parent, male or female, who does not have access to publicly funded reproductive medicine.

<sup>59</sup> Reported in Gay Becker, The Elusive Embryo: How Women and Men Approach New Reproductive Technologies (Berkeley, CA: University of California Press, 2000), quoted by Michael Banner, The Ethics of Everyday Life: Moral Theology, Social Anthropology, and the Imagination of the Human (Oxford: Oxford University Press, 2014), 50.

lessness must be for at least some intending parents, if they are prepared to put themselves through repeated cycles of IVF despite the procedure's having an impact on them that can be described in such strong terms. Yet reports like this also draw attention to the wider social, cultural and economic contexts that shape intending parents' experiences of infertility and fertility treatments in certain ways. Social and cultural influences might intensify the pressure to have a child of one's own or stigmatise unwanted childlessness, while economic structures and employment conditions may contribute to the problem by putting pressure on intending parents to postpone having children until later in life, at which point their risk of sub-fertility will be greater. Reproductive technologies such as IVF are sometimes seen (erroneously, in view of their costs, burdens and uncertain prospects of success) as an easy technological solution to these social and economic challenges.60

The CPCE guide cited above acknowledges these questions and adopts a critical perspective on the social, cultural and economic context that may generate such pressures. It cautions against the temptation to see IVF, cryopreservation and other reproductive technologies as easy technological "fixes" making it possible to avoid facing the political, social and economic issues that impinge on parents and families. It also argues that the New Testament places an "eschatological proviso" on marriage, procreation and family life, so that they are no longer of ultimate importance in the light of the coming kingdom of God – citing texts such as Jesus' saying, "Whoever does the will of God is my brother and sister and mother" (Mk. 3:35). This insight, the document argues, may be pastorally helpful in addressing the pain and countering the stigma associated with unwanted childlessness. Yet the CPCE document does not rule out IVF on the strength of these criticisms, nor (as noted earlier) does it endorse other objections such as those of *Donum Vitae*. While arguing that structural, social and cultural concerns must be addressed, it nonetheless maintains that IVF could be a source of blessing for those longing for children and facing the pain of infertility. 61

The Anglican moral theologian Michael Banner might be critical of the CPCE guide for not interrogating contemporary constructions of "the pain of infertility" more deeply in light of the New Testament texts and themes it cites. Drawing on social anthropological studies of the experience of IVF, Banner questions the view that reproductive technologies have unsettled biological kinship and made plain its socially constructed character. He argues that ethnographic evidence suggests

<sup>60</sup> See S. Ziebe and P. Devorey, "Assisted reproductive technologies are an integrated part of national strategies addressing demographic and reproductive challenges," Human Reproduction Update 14 (2008), 583-92 (585).

<sup>61</sup> CPCE, "Before I Formed You in the Womb...", 82.

"chasing the blood tie," or going to great lengths in the quest for genetically-related offspring, "remains one of the main determinants" of the ways in which ARTs are used. <sup>62</sup> This suggests the ongoing power in western societies of the social and cultural imperative to have "a child of one's own." Banner takes Christian responses to ARTs – in particular, Catholic magisterial teaching – to task for being too narrowly focused on the licitness of particular techniques. Christian reflection should, he maintains, give more attention to theologically critiquing contemporary constructions of biological kinship and the "tragedy of childlessness," in the light of Christian reflection on the incarnation and early Christian practices of celibacy, baptism and godparenthood. <sup>63</sup>

While Banner's stance towards technologies such as IVF appears very critical, it is interesting to note how much his position contrasts with that of authors such as O'Donovan and Meilaender. While they attach considerable importance to biological kinship in procreation, arguing that this is a given aspect of the structure of human creaturely being, Banner's emphasis is much more on the radical way in which Christian faith and practice *unsettle* biological kinship.<sup>64</sup> Various questions could be raised about his radically critical perspective. Empirically, the ethnographic picture may be read in different ways, so that the unsettling of biological kinship may be a more significant effect of the rise of ARTs than he allows.<sup>65</sup> Theologically and ethically, the relativisation of biological kinship emphasised by Banner is in some tension with the view, implicit in some New Testament texts and taken up by the Protestant Reformers and their successors, that marriage and family life may be a sphere in which believers can live out their Christian vocation to serve God and love their neighbours.<sup>66</sup> Susannah Cornwall has also argued that Banner gives too little weight to the embodied character and

**<sup>62</sup>** Banner, The Ethics of Everyday Life, 54.

**<sup>63</sup>** Ibid., drawing particularly on Augustine, Sermon 51, in *Sermons 51-94 (The Works of Saint Augustine: A Translation for the 21st Century*, vol. III/3), trans. Edmund Hill (Hyde Park, NY: New City Press, 1991).

**<sup>64</sup>** Though this theme is not absent from the other authors discussed: e.g. Meilaender, *Bioethics*, 24f.

**<sup>65</sup>** Banner does allow that the ethnographic evidence is mixed, but regards "chasing the blood tie" as one of the most dominant parts of the picture. Others might read the evidence with a different emphasis: see, e.g., Marcia C. Inhorn and Daphna Birenbaum-Carmeli, "Assisted Reproductive Technologies and Culture Change," *Annual Review of Anthropology*, 37 (2008), 177–96.

**<sup>66</sup>** The CPCE guide makes this point, alluding to a key distinction made by Dietrich Bonhoeffer: while biological parenthood can be seen, in the light of the Gospel, as no longer of *ultimate* significance, it may nonetheless be a worthy *penultimate* Christian calling: CPCE, "*Before I Formed You in the Womb...*", 46f.; cf. Dietrich Bonhoeffer, *Ethics*, ed. Ilse Tödt et al., trans. Reinhard Krauss et al. (Minneapolis, MN: Fortress, 2005), 146–70.

"animality" of human creaturely life. 67 Nonetheless, his account offers a stimulating and provocative reframing of recent debates, developing a social and cultural critique of current attitudes to procreation and kinship and the current practice of reproductive technologies by bringing ethnographic research into dialogue with theological sources and themes.

One area under-explored in these debates is the intersection between theologies of sexuality and the ethics of reproductive technologies. Much of the Christian ethical literature on reproductive medicine either claims or assumes that the normative context for procreation is heterosexual marriage. The debate about IVF then focuses on whether or not it is a legitimate means to enable infertile married couples to fulfil the procreative good of marriage. Some of the negative answers surveyed earlier find parallels in natural law objections to non-procreative forms of sexual activity, particularly same-sex relationships: sex is naturally ordered to both procreative and unitive goods, and sexual activity that is inherently nonprocreative is therefore judged intrinsically disordered.<sup>68</sup>

Accordingly, some theologians who have wanted to affirm same-sex relationships have done so by playing down the significance of procreation as a good or purpose of sexual relationship, <sup>69</sup> or by arguing that same-sex covenanted partnerships may be affirmed as another form of vocation alongside marriage and celibacy, distinct from marriage because inherently non-procreative. 70 Others have criticised such moves, pointing out that same-sex couples too may long for their relationships to be procreative or generative, and proposing alternative forms of generativity (such as adoption) that may be possible for same-sex relationships. 71 Yet this discussion in general makes surprisingly little connection with the increased range of possibilities offered by ARTs for people in same-sex relationships (and indeed others, such as those not in sexual relationships) to

<sup>67</sup> Susannah Cornwall, Un/familiar Theology: Reconceiving Sex, Reproduction and Generativity (London: Bloomsbury T & T Clark, 2017), 116f.

**<sup>68</sup>** E.g. Congregation for the Doctrine of the Faith, Persona Humana: Declaration on Certain Questions Concerning Sexual Ethics (29 December 1975), no. VIII. Online at http://www.vatican.v a/roman\_curia/congregations/cfaith/documents/rc\_con\_cfaith\_doc\_19751229\_persona-huma na\_en.html (accessed 12 September 2017).

<sup>69</sup> E.g. Rowan Williams, "The Body's Grace" (1989), republished on ABC Religion and Ethics (24 August 2011), online at http://www.abc.net.au/religion/articles/2011/08/24/3301238.htm (accessed12 September 2017).

<sup>70</sup> E.g. Robert Song, Covenant and Calling: Towards a Theology of Same-Sex Relationships (London: SCM, 2014).

<sup>71</sup> E.g. Cornwall, Un/Familiar Theology, ch. 5; Brett Gray, "Reproduction and the Body's Grace," in Thinking Again about Marriage, ed. John Bradbury and Susannah Cornwall (London: SCM, 2016), 152–66.

conceive biologically-related children.<sup>72</sup> There seems to be a complex reciprocal relationship between this technological expansion of the possible configurations of reproduction and parenthood, on the one hand, and changing societal norms and perceptions of kinship, family life and parenthood, on the other.<sup>73</sup> However one evaluates this expansion of possibilities from a Christian ethical standpoint, it certainly forms part of the current context for theological and ethical reflection about sexual relationship, family life and parenthood, and this intersection seems a fruitful area for future research and reflection.

# **Emerging areas of reproductive medicine and** ethical debate

IVF is a well-established practice, and a large body of ethical literature has grown up around it. Therefore, many of the arguments proceed along quite familiar lines – though as shown above, some new avenues of discussion are opening up and others have yet to be explored in depth. But the wider field of reproductive medicine includes newer and emerging areas of practice, and new research areas, which raise less familiar and well-rehearsed ethical issues. Four examples follow.74

- 1. While *pre-implantation genetic diagnosis (PGD)* is an established technique, growing knowledge of human genetics is continually expanding the possibilities of genetic testing and prediction. These expanding possibilities raise questions about broadening the scope of genetic selection beyond medical applications, to the selection of socially desired characteristics. Some bioethicists have explicitly advocated eugenic uses of PGD, arguing that parents have a moral obligation to "select the best children," a proposal vigorously opposed by others.<sup>75</sup>
- 2. Until recently, much of the ethical discussion has assumed that the widespread use of human genetic modification - particularly "germ-line" modifications capable of being passed on to future generations - was a rather distant

<sup>72</sup> Cornwall, for example, briefly notes this but mostly brackets ARTs out of her discussion: e.g. *Un/familiar Theology*, 101f.

<sup>73</sup> See Inhorn and Birenbaum-Carmeli, "ARTs and Culture Change."

<sup>74</sup> For these and others, see further CPCE, 'Before I Formed You in the Womb...', chs. 8-10 and references therein.

<sup>75</sup> E.g. Julian Savulescu, "Procreative Beneficence: Why We Should Select the Best Children," Bioethics 15, no. 5/6 (2001), 413-26; Sarah E. Stoller, "Why We Are Not Required to Select the Best Children: A Response to Savulescu," Bioethics 22, no. 7 (2008), 364-9.

prospect. However, the recent development of genome editing technologies seems to bring this prospect much closer, so that it may not be so long before societies and their political leaders have to make real decisions about the acceptability of attempting to modify human germ-lines genetically.

- 3. A new development in reproductive medicine is the introduction of mitochondrial replacement therapies to prevent the inheritance of genetic diseases affecting the mitochondria (sub-cellular structures containing some of their own DNA). These therapies use mitochondria donated by a third party, and so (albeit in a very limited way) result in children with three genetic parents. In the opinion of some commentators, this further intensifies the technological domination of procreation and the separation of different aspects of parenthood already begun by more established ARTs.
- 4. An emerging research area, which has so far attracted little reflection from Christian bioethicists, is the development of artificial gametes (sperm and ova). It could be argued that this would represent a further intensification of technological control by disconnecting procreation altogether from biological sex: for example, it might become possible to make artificial ova from cells taken from a man's body.

In comparison with IVF, practical theologians engaging with topics like these would have less well-established and extensive bodies of literature to work with. and would be engaging debates whose main lines and trajectories were more fluid and unclear. It is interesting to consider how practical theology as a method of theological analysis (Miller-McLemore's second aspect) might influence Christian approaches to emerging bioethical issues in areas such as these.

# Conclusion: Some items for a research agenda in practical theology and bioethics

To conclude this report, I shall identify and gather some of the questions for practical theology raised by the bioethical reflections on reproductive medicine surveyed in precious sections. From this collection of questions, the outlines of an ongoing research agenda for the relationship between bioethics and practical theology may begin to emerge, though it should be emphasised that this only a partial list, at best suggesting some elements of such a research agenda. The questions can be organised according to Miller-McLemore's fourfold description of practical theology, summarised earlier.

#### 1 Practical theology as an activity of believers

How might people seeking to "sustain lives of reflective faith" respond when those lives include the challenges addressed by reproductive medicine, such as unwanted infertility or the risk of having a child with an inherited disease? How do believers, including both potential users of reproductive medicine and health-care professionals, address the bioethical issues raised by ARTs in the context of lives of reflective faith? In particular, how do they negotiate the relationship between the teaching of their churches and their own moral deliberation and action regarding these issues?

What do believers need from their communities, particularly their ministers and leaders, to support reflective and faithful living in relation to reproductive medicine? What are the pastoral care needs of people facing infertility or inherited disease, or healthcare professionals treating them? What forms of Christian education will equip them to address bioethical questions about reproductive medicine in their own lives reflectively and faithfully? How can preaching enable them to hear how the Christian good news speaks to situations of infertility, genetic disease or the like? What forms of liturgical and sacramental ministry will enable believers to address such situations in the context of worship, and form Christian lives equipped to respond reflectively and faithfully to them? For example, how might the practice of baptism interrogate the assumptions about parenthood and kinship embedded in the practice of ARTs, or speak to the ambiguities of personal identity that may be experienced by someone conceived by heterologous IVF?

### 2 Practical theology as a method of theological analysis

How might the experience of ART users, children conceived by ARTs, and others affected by the practice of reproductive medicine, question and be questioned by bioethical reflection of the sort surveyed in earlier sections? In particular, how can "voices from the margins," such as those of women who experience ART procedures as ambivalent or alienating, or people with disabilities concerned about the practice of genetic screening and selection, be heard properly in these reflections?

**<sup>76</sup>** Miller-McLemore, "The Contributions of Practical Theology," 5.

<sup>77</sup> For one Catholic account of the interaction between pastoral care and bioethics, see Ashley et al., *Health Care Ethics*, 88f., 241–4.

<sup>78</sup> Cf. Banner, The Ethics of Everyday Life, 57.

How should the experience of healthcare professionals, particularly Christian professionals, inform Christian bioethical reflection and Christian practice in relation to reproductive medicine?

How should Christian practices, particularly practices of worship, preaching and the sacraments, inform and be informed by Christian ethical reflection on reproductive medicine? Christian ethicists such as Stanley Hauerwas have long emphasised the central place of the Church's worship in Christian moral reflection and formation, 79 and Michael Banner – as we have seen – argues specifically that Christian practices such as baptism, godparenthood and vowed celibacy might unsettle prevalent modern notions of kinship in the context of reproductive medicine.80 Some critics question whether empirical evidence bears out such claims about the importance of Christian practice;81 how might the relationship between Christian practice and bioethical understanding be appropriately investigated empirically?82

#### 3 Practical theology as curricular area

Much of this aspect follows from what has already been said about the first two. In summary, the questions here concern (inter alia) the bioethical content needed in the curriculum, and the training required in pastoral counselling, pedagogy, homiletics and so forth, so that those exercising various ministries will be equipped to support people seeking to respond faithfully and reflectively to the bioethical issues that face them in their own lives.

### 4 Practical theology as academic discipline

Again, much of this follows from what has been said about the other aspects. Questions raised by bioethics for practical theology as an academic discipline

<sup>79</sup> E.g. Stanley Hauerwas and Samuel Wells, ed., The Blackwell Companion to Christian Ethics (Oxford: Blackwell, 2004), Part 1. For a specific reflection on conception and ARTs in this vein, see Joseph L. Mangina, "Bearing Fruit: Conception, Children, and the Family," in ibid., 468–80.

<sup>80</sup> Banner, The Ethics of Everyday Life, ch. 3.

**<sup>81</sup>** E.g. Gill, Churchgoing and Christian Ethics.

<sup>82</sup> Banner briefly proposes on such study, an ethnography of the way in which L'Arche communities, which bring together people with intellectual disabilities and others who act as their "assistants," practice alternative forms of kinship to that of biological parenthood: The Ethics of Everyday Life, 58f.

could include the following: What research methodologies will be appropriate to investigate how believers face bioethical issues in the context of lives of reflective faith, or how the practices of Christian communities actually do inform Christians' bioethical reflection and action? How should people's experiences of reproductive medicine (as users, professionals or in other ways) interact with Christian ethical reasoning to guide their understanding and action?

Under this heading, the public dimensions of practical theology should also be recalled. For example, as noted earlier, individuals' ethical decisions and actions about reproductive medicine always take place in particular institutional. political and legal contexts, and are complexly related to those contexts. The interplay between believers' lives of reflective faith and the wider contexts in which those lives are lived is worthy of practical theologians' attention. The activity of Christian healthcare institutions may be understood as another sphere of Christian practice, alongside that of individual believers and church communities; yet, as we have seen, such institutions may find themselves in fraught relationships with both ecclesial and political authorities. The ways in which such institutions negotiate their Christian identity in contexts of religious and moral plurality may repay further study. And questions arise once again about the churches' public witness on bioethical questions. Should churches or their representatives, as such, seek to influence public debate, policymaking and legislation about such questions? If so, what should they be seeking to achieve, and how should they go about it?

To repeat, these are only some of the questions that could be asked about the interactions of bioethics with practical theology. However, I hope these examples suffice to show that such interactions offer highly fruitful possibilities for further study and research.