

The Ontology of Personhood: Distinguishing Sober from Enthusiastic Personalised Medicine

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Abstract

In light of the successful occupation of the term 'person' for Personalised Medicine, it is necessary to ask what different notions of personhood practically imply. This article examines two. The first is the reductionist molecular individual, embraced by PM enthusiasts. Here the person is a contradictory *dividuum*, oscillating between increased autonomy and a new, infantilising techpaternalism. The second relies on a Christ-analogical distinction of two modes. The dramatic amplitude of personal absence-presence then unfolds throughout time. This provides the logic or spirit of the medical act. Drawing on the ethics of war, it will be recast as an arduous task of mending.

Keywords

Personhood, dualism, Personalised Medicine, absence-presence, ethics, healthcare policy

Introduction

Personalised or individualised medicine (PM) has been described as a revolution in medicine. Determining a person's genetic and molecular profile is associated with earlier disease detection, a stratification of patient groups, and targeted treatment of diseases. Early successes, such as the drug imatinib for a specific sub-group of patients with chronic myelogenous leukemia (CML), seems to have inaugurated the age of PM—'the right treatment for the right person at the right time'.¹

1. See e.g. a 2015 briefing for the European Parliament: 'Personalised medicine. The right treatment for the right person at the right time', *European Parliamentary Research Service*, Members' Research Service, PE 569.009.

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Article

Peter Dabrock once noted that 'the mere fact that the word-creation "individualised medicine" raises no eyebrows, because today only very few people still think this is a pleonasm, surely must be understood as a phenomenon of the crisis of medicine and the vocation of the physician'. In an effort to deconstruct the 'language politics' of PM, Dabrock emphasises that the use of the term personhood, '(even more so than "individuality")' for 'a natural-scientific technique of differentiation, can under no circumstances be seen as even remotely innocent'. Personhood 'at least in the broad stream of the tradition comprising trinitarian theology, personalism, phenomenology, and social psychology-develops only in social togetherness'.² The currently successful occupation of the term 'person', however, may well indicate that such 'classical horizons of philosophicaltheological anthropology' have somewhat 'begun to darken'.³ No matter how clinically effective, PM presents an anthropological challenge. An unbroken enthusiasm around PM augurs further transformations for medicine and the public healthcare system, research agendas and clinical consultations.⁴ In some quarters a post-hype hangover has also set in. Meanwhile, health service commissioners are expected to 'deliver' to meet growing patient expectations.⁵

In this article I argue that at least two fundamentally different notions of personhood are at work in the public debate on PM which require discernment. The first centres on patients' individuality, which PM promises to heed more than ever. However, if personhood is reduced to this, then the *in*-dividuum is effectively deeply divided, which explains several unsavoury side-effects of present-day PM. This notion of the person is in many ways a fiction, albeit a powerful one. In connection with PM it functions as a lever, for example to further dismantle socialised healthcare and the fabric of solidarity underlying it.⁶

Drawing on the work of John Zizioulas, Eberhard Jüngel and others, I then explore, second, a theologically grounded existential phenomenology of personhood. Instead of two divided substances, the person is in two distinct, but not divided, modes of being: the biological and the trans-individual or social mode. The person is an intrinsically

Peter Dabrock, 'Die konstruierte Realität der sog. individualisierten Medizin. Sozialethische und theologische Anmerkungen', in Volker Schumpelick and Bernhard Vogel (eds), *Medizin* nach Maβ: Individualisierte Medizin - Wunsch und Wirklichkeit (Tübingen: Herder, 2011), pp. 239–67, at pp. 240–41.

Thomas Metzinger, cit. in Günter Rager, *Die Person: Wege zu ihrem Verständnis* (Freiburg: Academic Press Fribourg; Freiburg im Breisgau: Herder, 2006), p. 165; 'An Interview with Thomas Metzinger: What Is the Self? You Are Not Who You Think You Are', (2012), at http://deconstructingyourself.com/what-is-the-self-metzinger.html

See esp. Tim Maughan, 'The Promise and the Hype of Personalised Medicine', *The New Bioethics*, Special Issue: Personalised Medicine: The Promise, the Hype and the Pitfalls, 23.1 (2017), pp. 13–20.

Sebastian Schleidgen *et al.*, 'What is Personalised Medicine? Sharpening a Vague Term Based on a Systematic Literature Review', in Jochen Vollmann *et al.* (eds), *The Ethics of Personalised Medicine: Critical Perspectives* (Farnham: Ashgate, 2015), pp. 9–24.

Cf. Bishal Gyawali and Richard Sullivan, 'Economics of Cancer Medicines: For Whose Benefit?', *The New Bioethics*, Special Issue on Personalised Medicine, 23.1 (2017), pp. 95–104.

ex-cessive being. One implication is that personhood only unfolds throughout time. This entails the specific movement of medicine: as disease and death threaten to irreversibly divide the person, the medical act aids the restoration of a person's always precarious distinction-in-unity of the social and biological.

These two anthropologies imply a significant practical distinction: on the one hand an enthusiastic, hyped, but ultimately fruitless PM—what I call 'enthusiastic PM' (EPM)— and on the other hand a *sobered-up* personalised medicine (SPM) that is both instrumental and effective. In order to introduce a way in which a sobered-up PM can work, I operationalise the ethics of war as a set of criteria for interpreting and incorporating PM into a regular medical practice adequate for persons.

Enthusiastic Personalised Medicine (EPM)

What Ingrid Slade calls the 'advocacy-based' understanding of PM brings together several strands of thought: the idea that persons are individuals, biological substances, and the result of their genetic make-up. This understanding has a long, complicated trajectory, which can only partly be sketched out here.

A Substantivist, Individualist Notion of the Person

The person as an *ontological* individual goes as far back as Boethius' sixth-century reflection on the person of Christ: *persona est naturae rationalis individua substantia*— the person is an individual (metaphysical) substance with a rational nature, i.e. a 'self-standing singularity'. 'With this', Adrian Holderegger highlights, 'the person is no longer defined by an act of being, which could be described as free, rational, or conscious, but rather by nature alone, whose *specificum* is then that it is also rational'.⁷

Besides this substantivist background, the Cartesian turn towards subjectivity was a key moment. For Descartes, the self was given in the mode of reflection as such; the thinking and the existing human being became identical. 'With this, the re-connection of the person to constitutive elements such as reason, individuality, and relation becomes more difficult and intransparent. Here the "person" is no more than a bracket between body and mind. Mind and body are *distinct substances*. They constitute a functioning unit which is guaranteed by the person'.⁸ Cartesian mechanistic physiology, popular well into the nineteenth century, could merge well with John Locke's person as 'self-conscious, rational human being'.⁹ For Locke, there was no longer a need for metaphysical

Cf. Adrian Holderegger, 'Person in der Perspektive von Theologie und Ethik', in Günter Rager and Adrian Holderegger (eds.), *Bewusstsein und Person: Neurobiologie, Philosophie und Theologie im Gespräch* (Freiburg: Herder, 2000), pp. 86–105, at p. 91.

^{8.} Dominik Perler, René Descartes (München: Beck, 1998), p. 215 n. 20 (emphasis added).

^{9.} Locke addresses the question of how to treat the weak and comatose by way of a theological notion of the human: they belong to God, and so they can't be possessively treated. L. Siep: This is a 'a theoretical emergency operation', which cannot hold without theological underpinnings (Holderegger, 'Person in der Perspektive', p. 97 n. 30).

substance; his 'substance' was empirical matter. The underpinnings of modern medicine and evolutionary theory lean heavily on these traditions, relying on their biological, material(ist) sides. Most medical ethics textbooks today refer to J. S. Mill as a champion of individuals' autonomous consent and, based on self-ownership, their freedom from unwanted, paternalistic intervention.

However, *genomic* medicine developed out of molecular biology, in vicinity to scientists seeking purely physical-chemical answers to humanity's 'big questions'. From the 1950s onwards the quest for DNA coincided with a cultural fascination for science fiction, not least under the dark cloud of nuclear threat. Outer space and the genome established the 'new frontiers' of humanity's (self-)conquest.¹⁰ As an industry, biotech took off in the late 1970s with the growth of venture capitalism driven by the increased value of marketable information. The era heralded the triumph of the entrepreneurial *homo economicus*, the hero of material maximisation, control and pragmatic self-management. The rise of the well-informed, consumer-patient coincided with this.¹¹

The 'inward discovery'¹² of humanity was eventually said to culminate in the genome. In the last instance, our DNA was to be the 'hidden ruler of life' that makes us who we are.¹³ More recently, epigenetics have extended and complicated this field of knowledge.¹⁴ The Human Genome Project (HGP) may not have yielded the 'revolutionary'¹⁵ results it promised, but public and business investment in PM continues. Personalisation, prediction, prevention and participation (4P) are to replace 'reactive medicine' as we know it with 'health maintenance'.¹⁶ Critique is seen as suspicious: anti-progressive and Luddite, it jeopardises Western countries' prospects in the global economic race.

^{10.} Steve Sturdy, *The Genomic Revolution in Medicine*, Centre for Personalised Medicine, Oxford, 12 November 2015.

^{11.} Cf. Alex Mold, *Making the Patient-Consumer: Patient Organisations and Health Consumerism in Britain* (Manchester: Manchester University Press, 2015).

Transcript: Exploring Our Molecular Selves, https://www.genome.gov/25520226/onlineeducation-kit-transcript-exploring-our-molecular-selves (accessed 15 April 2017); cf. also 23andMe's Christmas offer in 2015: 'Give the gift of knowledge'; and Michael Snyder's 'iPOP' (integrative Personal Omics Profile) or the 'Snyderome': Rui Chen *et al.*, 'Personal Omics Profiling Reveals Dynamic Molecular and Medical Phenotypes', *Cell* 148 (2012), pp. 1293–1307.

Renato Dulbecco, cit. in Regine Kollek and Thomas Lemke, Der medizinische Blick in die Zukunft: Gesellschaftliche Implikationen pr\u00e4diktiver Gentests (Frankfurt; New York: Campus Verlag, 2008), pp. 55–57.

Aleksandra Stelmacha and Brigitte Nerlicha, 'Metaphors in Search of a Target: The Curious Case of Epigenetics', *New Genetics and Society* 34.2 (2015), pp. 196–218.

^{15.} NB: The HGP marked the endpoint of a long search for a 'miracle' cure after the 'therapeutic revolution' had come to a halt. The theological significance of such terms should not go unmissed, so the philosophy of (scientific) revolutions requires further investigation.

Personalized Medicine Coalition (2014), http://www.personalizedmedicinecoalition.org/; Kevin M. Sweet and Ron C. Michaelis, *The Busy Physician's Guide to Genetics, Genomics and Personalized Medicine* (Dordrecht: Springer Netherlands, 2011), p. viii.

The Unhappy Dialectics of the Molecular Individual

The notion of 'person' emerging in this what one might call enthusiastic personalised medicine (EPM) is marked and haunted by a particular, problematic logic: the *in*-dividual is deeply divided, to the point even of internal contradiction.

The first division or dualism consists in the reduction of personhood to molecularbiological terms. Not the phenotypical person—the sick patient who, up until now, was supposedly always given a 'one-size-fits-all' treatment—but the altered genotype is the truly unique person here. A 'holistic' approach in this context has to extend the substantivist individual: complete knowledge of the person means more 'omic' *data*. This descriptive reduction sharply divides from other forms of personal encounter. In this sense, PM is not substantially different from, but a specific continuation of, biologyoriented medicine as a whole. It 'perpetuates a structural plane of immanence, which is but an identical repetition of *the same*. Biology *must* reduce that which it describes to nothing, that is, nothing outside its descriptive abilities (DNA, etc.). This is the "text" which biology is, and this text has nothing outside it...'.¹⁷ In other words, the complete 'literation' of life into codes and elements, the ancient *stoicheia*, simultaneously *ob*-literates life.¹⁸ Quite in this spirit, molecular medicine is believed to 'transform ... everyday clinical practice from an empirical art to a rational ortho-molecular science'.¹⁹

This reduction of the person to a merely molecular object has been frequently criticised. For example, Thomas Wabel noted the purely rational, autonomous coping strategies furthered by PM: the identification and analysis of diseases, the search for alternatives, and finally disease management and control. However, 'in these strategies—indispensable as they are—the body, the physical *condition* for existence, becomes the *object* of analysis and action'. And: 'To regard my body as the object of medical treatment, means to distance myself from the body (*Körper*) I *have*'.²⁰ Regarding predictive medicine, Christiane Woopen has similarly noted: 'For the human being, his own body increasingly becomes an objectified entity, which he no longer feels primarily to be an "T" in the sense of a unity of body and soul, but an "It" he has examined and treated'.²¹ Overmedicalisation and overtreatment is the most overt result.

^{17.} Conor Cunningham, Genealogy of Nihilism: Philosophies of Nothing and the Difference of Theology (London: Routledge, 2002), p. 177.

^{18.} Hub Zwart, Personalised Medicine, Self-Management and Intimate Technologies: A Philosophical Analysis (London: Henry Stewart Talks, 2016). Like E. Jüngel (see below) an interpreter of Hegel, Zwart particularly mentions stoicheia as both elements and letters. Paul contrasts Christ with the stoicheia tou kosmou in Col. 2:8, 20, 21 and Gal. 4:3, 9, 10; see also Timothy Ashworth, Paul's Necessary Sin: The Experience of Liberation (Abingdon and New York: Routledge, 2016).

Panagiotis A. Konstantinopoulos, Michalis V. Karamouzis and Athanasios G. Papavassiliou, 'Educational and Social-Ethical Issues in the Pursuit of Molecular Medicine', *Molecular Medicine* 15.1-2 (2009), pp. 60–63, at p. 60.

Thomas Wabel, 'Patient as Person in Personalised Medicine: Autonomy, Responsibility and the Body', in Vollmann *et al.* (eds), *The Ethics of Personalised Medicine*, pp. 53–64, at p. 58.

Christiane Woopen, 'Individualisierte Medizin als zukunftsweisendes Leitbild?' in Volker Schumpelick and Bernhard Vogel (eds), *Medizin nach Maβ: Individualisierte Medizin – Wunsch und Wirklichkeit* (Freiburg, Basel, Vienna: Herder, i.A. Konrad-Adenauer-Stiftung, 2011), pp. 94–110, at p. 101; Wabel, 'Patient as Person', p. 58.

This first dualism engenders a second dualism, a contradictory oscillation one might call the 'bad dialectics of EPM'. Here, even the Cartesian dualism championed by biomedical individualism is instable, because the material body as a mere 'thing' and the autonomous will cancel each other out. As our genome is oddly everywhere and nowhere, the body dissolves into data packages, or 'network nodes', beyond the confines of its physical boundaries—and control.²² Interacting with 'risk factors' between health and disease, the discursively objectified body then gains a new eerie, life-determining agency, undermining the very Cartesian inertness of the object: the 'exposome' or other 'omes' constantly redefine and extend the individual. As Conor Cunningham put it: 'The "cancer" of my body is a world unto itself. My leg becomes apart from me, it grows as it re-narrates my body, in a manner of which Kafka would be proud. Our bodies come apart as knowledge rips them asunder, even though it may keep them intact.²³ In this context Woopen worries about overmedicalisation: 'More and more tests are done, more and more diseases are feared, the worries about health take on a growing space in people's consciousness, in their responsibility and lifestyle.'24 Here, a new genomics-based lifestyle industry looms at the horizon-including vast opportunities for quackery.

But just as EPM's notion of the body oscillates between the biological object and a threatening presence of (non-)disease or lifestyle-idol, so its autonomous (consumer-)will and Foucauldian 'technologies of the self' paradoxically imply a new, subtle paternalism. Based on genetic prediction, EPM promises to enable patients to 'actively own ... their healthcare decisions'.²⁵ More health data suggest more autonomy, (auto-)biographical control, better informed consent, effectively a 'fully permissive medicine' ultimately guided by personal preference.²⁶ As the DNA sequence appears to chart out a particular life-course, the person can leap ahead and retrospectively manage the present, adjusting their life according to genetic or other '-omic' parameters. Increased autonomy implies a self-abstraction predetermined by genetic diagnosis. The patient internalises the principle of private insurance.

But this autonomy immediately collapses into paternalist control and technological (self-)infantilisation, equipped with nudges, monitoring gadgets and apps.²⁷ An increased responsibilisation grounded in information-based autonomy implies intensified preventive compliance-regimes.

David Armstrong, 'The Rise of Surveillance Medicine', Sociology of Health and Illness 17.3 (1995), pp. 393–404; Kollek and Lemke, Der medizinische Blick in die Zukunft, pp. 120–21.

^{23.} Cunningham, Genealogy of Nihilism, p. 177.

^{24.} Woopen, 'Individualisierte Medizin', p. 101.

^{25.} Sweet and Michaelis, The Busy Physician's Guide, p. viii.

Robert A. Freitas (2007), cited in Marianne Boenink (2010), 'Molecular Medicine and Concepts of Disease: The Ethical Value of a Conceptual Analysis of Emerging Biomedical Technologies', *Medicine, Health Care, and Philosophy* 13.1 (2010), pp. 11–23, at p. 19.

Cf. Hub Zwart, 'Personalised Medicine, Self-Management and Intimate Technologies', section: 'Paradox', at https://hstalks.com/t/3203/personalised-medicine-self-management-and-intimate/; Iltifat Husain and Des Spence, 'Head to Head: Can Healthy People Benefit from Health Apps?' *BMJ* 350, 14 April 2015, at http://www.bmj.com/content/350/bmj.h1887; David Armstrong, 'The Rise of Surveillance Medicine', *Sociology of Health & Illness* 17.3 (1995), pp. 393–404.

The more we know about predispositions through genetic testing, the more our health and our diseases will seem to be results, products of our own actions, indeed products of our own will ... In return, the person who is ill, will be confronted with the underlying question of why they became ill and, if not genetically advised, whether they could not have prevented the outbreak of the disease by taking a predictive genetic test. In this way, becoming ill will be moved into the personal responsibility of the patient.²⁸

This is particularly attractive to private insurance companies. Equipped with financial 'soft' power, they may more intrusively mandate less cost-intensive lifestyles.²⁹

Looking at empirical research, Wabel noted a 'dialectics of autonomy' also with regards to the doctor-patient relationship: 'On the one hand, all additional information is helpful for making a rational choice in a situation of incomplete information, thereby increasing autonomy. On the other hand, interview studies have shown that, for some patients, the possibility to choose is a burden rather than a benefit'.³⁰ As disease becomes more abstract and clinical specialisations once again fragment, clinicians' depth of control effectively increases. Yet *they* are depersonalised too, handing over patients from specialist to specialist in a minutely differentiated healthcare industry.³¹

In short: the 'enthusiastic' version of Personalised Medicine appeals to and intensifies the substantivist, reductionist anthropology in which the *in*-dividual is paradoxically marked by a logic of *division*: first, a division from a more than scientifically reduced understanding of the person; second, divided and contradicting internally.³² In other words, in the most enthusiastic versions of PM, personhood first becomes an impossibility, and then we unsuccessfully oscillate between its two Cartesian constituents: our cherished autonomy, now the object of new regimes, and our body, no longer the mere quiet functioning of the organs.³³ Stable biological 'thinghood' is an optical illusion.

Giovanni Maio, 'Chancen und Grenzen der personalisierten Medizin—eine ethische Betrachtung', G+G Wissenschaft 12.1 (2012), pp. 15–19.

^{29.} Cf. Konstantinopoulos et al., 'Educational and Social-Ethical Issues'.

Wabel, 'Patient as Person', p. 55; Arndt Heßling and Silke Schicktanz, 'What German Experts Expect from Individualized Medicine: Problems of Uncertainty and Future Complication in Physician-Patient Interaction', *Clinical Ethics* 7.2 (2012), pp. 86–93, at p. 90.

Cf. Sebastian Wäscher *et al.*, "Personalisierte Medizin" in der Onkologie: Ärztliche Einschätzungen der aktuellen Entwicklung in der Krankenversorgung. Ergebnisse einer qualitativen Interviewstudie, *Ethik in der Medizin* 25.3 (2013), pp. 205–214.

^{32.} This coheres with Marina Levina's analysis of Deleuze's 'dividual' in network- and control societies (rather than Foucault's disciplinary societies): 'Health 2.0 and Managing "Dividual" Care in the Network', in Marina Levina and Grant Kien (eds), Post-global Network and Everyday Life (New York: Peter Lang, 2010), pp. 113–26. NB: Levina regards the dissolution of the (Foucauldian) individual into exchanging data packages as an affirmation of social personhood. See Richard Tutton, Genomics and the Reimagining of Personalized Medicine (New York and London: Routledge, 2016), p. 163. On the ethical 'dividuum' see already Friedrich Nietzsche, Menschliches, Allzu Menschliches, §57.

^{33.} Cunningham, Genealogy of Nihilism, p. xii.

Two Ways Ahead: Further Reductionism, Mediate Paths

One next step has been to push molecular reductionism to its conclusion. As consciousness is increasingly mapped onto the brain, some neuro-philosophers have suggested 'personhood' itself is a fiction.³⁴ But if there are no persons, everything can be a person, such as objects endowed with artificial intelligence. Business models connecting PM with the Internet of Things point in this direction.³⁵ The moral imperative is to successfully enhance biological biographies as part of an overall *evolutionary* narrative of humanity, a species within an overall networked flux of data.³⁶ What looms is a kind of post-patienthood for health 'customers' and 'service-users'. But more 'personal characteristics' in the form of data harbour *less* compassionate care on the whole. Why not withdraw care from someone who has been negligent, despite known genetic risk factors? With disease turning into a matter of moral judgment, the dark underbelly of EPM's autonomous individual is the hospital reject, the 'human trash' *who deserves it.*³⁷

The divided logic of EPM's notion of the patient has also been countered by insisting on a 'mind–body unity'.³⁸ But if transcendental agnosticism merely acknowledges *that* there is a unity of soul and body, such insistence remains an inconsequential admonition, especially in the absence of a definition of 'soul'. Nonetheless, if we look at recent developments in theological anthropology, personhood as more than a vague individual mindbody unity has considerable consequences. If biology—and specifically genomic medicine—is sublated into this logic of personhood, it can be understood and embraced as an improved tool.

Thomas Metzinger, *Being No One: The Self-Model Theory of Subjectivity* (Cambridge, MA: MIT Press, 2003); replacing personhood with 'bodyselves': Philip Hefner, Ann Milliken Pederson and Susan Barreto, *Our Bodies Are Selves* (Eugene, OR: Wipf & Stock, 2015), esp. pp. 2–10.

^{35.} Jürgen Anke and Andreas Schwatke, 'Das Internet der Dinge als Grundlage für innovative e-Health-Dienste', in Elisabeth Eppinger *et al.* (eds), *Dienstleistungspotenziale und Geschäftsmodelle in der Personalisierten Medizin* (Heidelberg: Springer, 2015), pp. 485–513.

^{36.} See Marina Levina, 'Health 2.0', above; in this sense, as one of the anonymous reviewers of the present article rightly notes, the dualism functions within an overall monism. On the biographical imperative: 'A Moral Imperative to Pursue Gene Editing Research?', *BMJ blogs*, 10 December 2015, at http://blogs.bmj.com/medical-ethics/2015/12/10/a-moral-imperative-to-pursue-gene-editing-research/?q=w_jme_blog_sidetab; some transhumanists embrace predictive PM, others see it as waste of money, e.g. Gregory E. Pence, *How to Build a Better Human: An Ethical Blueprint* (Lanham, MD: Rowman & Littlefield, 2012), pp. 88–89; critical from a Niebuhrian perspective: Noreen Herzfeld, 'More than Information: A Christian Critique of a New Dualism', *Theology and Science* 14.1 (2016), pp. 84–92.

^{37.} At present, a retrospective attribution of responsibility for disease remains legally problematic, since the disadvantaged are protected by welfare rights; this is less so the case in privatised systems. Miriam Keil, *Rechtsfragen der individualisierten Medizin* (Berlin and Heidelberg: Springer, 2015), p. 241; Dabrock, 'Die konstruierte Realität', p. 253.

^{38.} Woopen, 'Individualisierte Medizin', pp. 96, 101.

The Ontology of Personhood

Of course, the dialectics of the genomic individual may be all there is. This is the stance of the joyful *homo geneticus* in glossy prospectuses. But a significant amount of anxiety lurks in this vision: the frightening, abysmal option of death, which is a mere (or sheer) *abyssos*, and the social stigma associated with disease, now a negligent lapse of maintenance. Unsurprisingly, the genomics and big-data hype cannot grasp these anxieties.

Personhood—Advent, Presence

To point at this abyss or indeed any kind of true *lack* in molecular-biological discourse is already to make it merely an option. Heeding this abyss is to already move beyond it, the door through which personhood (re-)enters. It is to acknowledge in human persons 'an excessive moment that breaks free of immanent description',³⁹ though far from invalidating the immanent. Put differently, the deficiencies of the genomics hype are not addressed by adding more data to the individual patient (for all we know, the Good Samaritan had no patient record of the man by the road). It is rather by going beyond the reductionist biomedical stoicheia, into the abyss of death, suffering, failure, the hospital reject, the supposedly 'deserving' sick. It is to integrate such horrific non-existence into healthcare, though not by merely 'managing' it. This breaking-through of a being's excessiveness is a moment of *advent*, the recognition of that which is outside in the middle of life, so that the middle can truly become itself.⁴⁰ On this assumption a reflection on humans as the *imagines Dei* becomes intelligible in the first place: human personhood through Christ's human-divine personhood (through weakness and death risen to eternal life).⁴¹ In other words, there is a 'temporal infinitude', an intrinsic ex-cessiveness to the physical human that questions them as mere information, even if that is very precious information.

With reference to historical theology John D. Zizioulas has influentially described such a pre-Boethian understanding of personhood.⁴² As theologians were debating the Incarnation in the fourth century, the term *hypostasis* (mode of being) ceased to denote 'substance' and became synonymous with 'person'. Personhood came to be regarded as the foundation of being as such. It was no longer the fleeting attribute of an individual substance.⁴³

^{39.} Cunningham, Genealogy of Nihilism, p. 177.

^{40.} For Heidegger, anxiety arises from the advent of the nothing outside one's existence (*Dasein*); for Jüngel, who is the main reference point here, the advent is marked by a lingual event of truth allowing one to come to oneself outside oneself; cf. Arnold Neufeldt-Fast, 'Martin Heidegger: *Anstoβ* for Eberhard Jüngel's Theology', in R. David Nelson (ed.), *Indicative of Grace—Imperative of Freedom* (London and New York: Bloomsbury, 2014), pp. 187–202; cf. also Cunningham, *Genealogy of Nihilism*, p. 178.

^{41.} Cf. Ingolf U. Dalferth, *Becoming Present: An Inquiry into the Christian Sense of the Presence of God* (Leuven; Paris; Dudley, MA: 2006), pp. 37–38.

^{42.} Zizioulas's historiography is not uncontested, but influential. See Holderegger, 'Person in der Perspektive'; Joel Shuman, *The Body of Compassion: Ethics, Medicine, and the Church* (Eugene, OR: Wipf & Stock, 2003), pp. 86–90; Anthony C. Thiselton, *Systematic Theology* (Grand Rapids, MI and Cambridge: Eerdmans, 2015), p. 36 and passim.

Oliver O'Donovan, 'Again, Who is a Person?', in M. Therese Lysaught and Joseph J. Kotva Jr. (eds), On Moral Medicine: Theological Perspectives in Medical Ethics, 3rd edn (Grand Rapids, MI and Cambridge: Eerdmans, 2012), pp. 367–71, at p. 368.

Personhood, Zizioulas explains, signifies not an individual bounded singularity, but the 'openness of being', even 'the *ek-stasis* of being'. Personhood is a 'movement towards communion which leads to a transcendence of the boundaries of the self and thus to freedom'.⁴⁴ Significantly, 'the person in its *ekstatic* character reveals its being in a *catholic*, i.e. integral and undivided [!], way, and thus in its being *ekstatic* it becomes ... the bearer of its nature in its totality'.⁴⁵ Persons *are*, and are 'global' and truly themselves in unbounded, free relations of love. This does not imply a collectivist eradication of the individual. Quite the contrary: personal *ek-stasis* is partly constitutive of meaningful particularity and autonomy. In the final analysis, Zizioulas emphasises, that which 'makes a particular personal being be itself—and thus be at all—is ... *communion, free-dom* and *love*'.⁴⁶ Effectively, for Zizioulas, the fourth century replaced the ontology of substance with an 'ontology of love'.

For Zizioulas, true personhood *as a particular* individual can only be achieved by God, who *is* love, but whose particularity is established as the one person Incarnate in Christ. In other words: God is a particular being 'not by virtue of its boundaries (he is "incomprehensible", "indivisible" etc.), but by its *ekstasis* of communion (he is eternally Trinity and love) which makes it unique and indispensable'.⁴⁷ Precisely in this way humans strive to become the *imago Dei*: to achieve full *ekstasis*, for 'all to be in all'. This striving forms the desire not only for seemingly 'autonomous' mastery, but also the susceptibility to all kinds of *hype*. The intrinsically excessive notion of human personhood starkly contrasts with the primary dualism of EPM's joyful Deleuzian reductionism. The actual presence of persons challenges a hermetically sealed biomedical discourse, without merely tick-boxing a 'mind–body' unity.

Personhood—Absence

Notably, the excessiveness of personhood does not tear asunder again the relational person and the material body. This conclusion is a recurrent problem in writings that conflate medicine with pastoral, (church-)community care in an attempt to counter the alienating coldness of modern, industrialised medicine.⁴⁸ Rather than consisting again of two separate spheres or substances, the human person persists in two distinct yet inseparable *modes*: what Zizioulas calls the 'ecclesial mode' (i.e. the trans-individual, relational) and the biological mode. Persons are always *as* born, embodied individuals. In the biological

^{44.} John D. Zizioulas, *Communion and Otherness: Further Studies in Personhood and the Church* (London and New York: T&T Clark, 2006), p. 213.

^{45.} Zizioulas, Communion and Otherness, p. 213.

^{46.} Zizioulas, Communion and Otherness, p. 214; emphasis original.

^{47.} Zizioulas, Communion and Otherness, p. 215.

^{48.} Esp. Shuman, *The Body of Compassion*, and Stanley Hauerwas, 'Must a Patient Be a Person to Be a Patient? Or, My Uncle Charlie Is Not Much of a Person but He Is Still My Uncle Charlie', in M. Therese Lysaught and Joseph J. Kotva Jr. (eds), *On Moral Medicine: Theological Perspectives in Medical Ethics*, 3rd edn (Grand Rapids, MI and Cambridge: Eerdmans, 2012), pp. 377–78. Hauerwas problematically erodes the person, who for him is either an individual or amalgamated into the *ekklesia*.

mode of existence they are subject to disintegration, that is, final division. Death and disease are the ultimate threat to communion, freedom and love. The cadaver, the human corpse is the only 'thing' remaining, the true 'individual'.⁴⁹ Conversely, just because it attends to the person's biological mode, molecular medicine is not *per se* reductionist.

Personhood thus equally depends on a paradox, albeit one of presence and absence. The person's catholicity or globality in relations of love may suggest transparent plenitude. But in reality there is of course also a hiddenness to persons that defies all surveillance, which is the result of patients' and observers' own limited bodies. To use a different analogy: 'The very fact of religions, cults, temples and rituals shows that the gods are not present. For if they were we would live in cities without temples and churches as the seer of the revelation of John described the heavenly Jerusalem'.⁵⁰ This absence–presence is not least hinted at in Paul (1 Cor. 13:12): 'For now we see in a mirror, dimly, but then we will see face to face'—whereby *prosopon* (face) signified person. The full realisation of personal presence (*both* human and divine) remains an eschatological problem.

The simultaneous ecstatic relationality and inaccessibility of persons resonate with experience. It is impossible to 'sum up' a person, for example after death. The person 'is' in unrepeatable connections to others, who can only share their memories.⁵¹ What a person is for themselves remains opaque, to an extent also for themselves. Their true 'sum' would be all their relationships in the past, present and future, including the relationships of those too. This would require a kind of omniscience, but would result in no more than *judgment*. From this perspective, the aim of a truly 'holistic' medicine raises grave concerns. Beyond logistic limits, it suggests either a reduced or a totalitarian understanding of the whole.⁵²

At the same time, if one takes relationality-in-communion seriously, it becomes clear why Orthodox traditions could see each person as a *theophany*-in-humanity and corporate identity. Each person could be Christ (*theosis*); each relation of love the Church as a whole.⁵³

Personhood in Time—Becoming

The logic of presence-absence introduces what I would call a *dramatic amplitude* into personhood. Encountering persons is to recognise them as infinitely more than

- 50. Dalferth, Becoming Present, p. 50; cf. also the body as a temple in 1 Cor. 6:19-20.
- 51. Cf. the event of Christ the person resulting in four gospels.

^{49.} Strictly speaking, replacing 'PM' with 'Individualised Medicine' would reduce the clinician to a pathologist, and medicine to autopsy. For Jeffrey P. Bishop, adapting Foucault, this is inevitably the case in modern medicine. See *The Anticipatory Corpse: Medicine, Power, and the Care of the Dying* (Notre Dame, IN: University of Notre Dame Press, 2011), p. 55, 279–80, 413.

Cf. 1 Cor. 2:16; Eberhard Tiefensee, 'Zum Begriff der Ganzheitlichkeit', *Journal Tumorzentrum Erfurt* 2 (2006), pp. 15–19; Eberhard Jüngel, *Ganz Werden* (Tübingen: Mohr Siebeck, 2003), pp. 40–53.

Hamartiology then concerns the *Un-person* or *Un-mensch*; cf. also Jüngel on the 'Untruth of Sin' in *Justification: The Heart of the Christian Faith* (Edinburgh and New York: T&T Clark, 2001), pp. 89–146.

individuals, and simultaneously much less, as radically unavailable. Individuals can be confined and as *data packages* handled like dispensable bulk goods (despite their unique DNA); such reduction or dissolution is hardly possible for persons. Moreover, dramatic amplitude captures personhood as something emerging (*e-venire*). In being 'advents', persons—again Christ-analogously—are also *events*, hence more significant than a mere occurrence or incidence. As health is lost and regained throughout life-time, humans are always *becoming* persons, social 'mind–body unities'.⁵⁴ In other words: the dramatic amplitude of persons as 'much more' and 'much less' unfolding through and becoming in time happens before a horizon of reconciliation, or personhood (re-)gained.

Sobering up Personalised Medicine

Quite undramatically, this dramatic amplitude of the person provides the very logic that sobers up personalised medicine. In challenging the primary dualism underlying biomedical reductionism, personhood unfolding throughout time readjusts the divided dialectics of EPM.

At the same time, with the overarching theological meta-discourse of personal reconciliation in mind, medical ethics may analogously 'poach' in the fields of the ethics of war.⁵⁵ If politics can be thought before the horizon of an ontological peace that overcomes political division, then the medical/caring act analogously seeks to affect physical health with faith in an ontological health which overcomes contemporary Cartesian divisions of substance.⁵⁶ This is not least sustained by Christian metaphors: God as the ultimate physician, the *Christus medicus*, and the Prince of Peace. They meet in the holicity of *shalom* (wholeness, health or peace). Diseases such as cancer are often metaphorically described as 'enemies' to 'battle', and some therapies akin to 'nuclear options'. Preventive interventions are possible as much as genetic surveillance. Just like drones, treatments can 'precision-target' malign tissues or invasive microorganisms. As in politics, the danger is to fall into absolute dualism, a total enmity.⁵⁷

Between Hype and Abandonment: Mending the Body

Such a logic of reconciliation inherent in personhood has significant implications. First, for the understanding of medicine: concerned with actual physical disintegration,

^{54.} O'Donovan crucially points out that personhood resists exhaustive analysis. Rather, one proves to be a neighbour (and person) by seriously attending to manifesting appearances. O'Donovan, 'Again, Who is a Person?', p. 371.

^{55.} Beyond the metaphorical, a theological-systematic transferability between different 'topical' or 'applied' ethics may point to Rom. 12:1-8, or 1 Cor. 12:4-6. On the false enthusiasm (!) Paul addresses, see e.g. Hans Conzelmann, *1 Corinthians: A Commentary* (Philadelphia, PA: Fortress Press, 1994).

Cf. Michael Dörnemann, Krankheit und Heilung in der Theologie der frühen Kirchenväter (Tübingen: Mohr Siebeck, 2003); Bernhard Nausner, 'The Medical Encounter as Communion: Medical Humanities, Health Care and the Trinity', Practical Theology 4.2 (2011), pp. 181–99.

^{57.} Critical: Austin L. Campbell, 'Medical Manichaeism: Toward an Augustinian Intervention', *Journal of Religious Ethics* 41.2 (2013), pp. 310–31.

'reactive medicine' remains a pleonasm. As a scientific discipline of *mending* it wrestles the person from 'thinghood': it counters the division between mind and body to the point of 'betrayal' (e.g. in pain), but equally the division between *persons* as reduction-in-suffering threatens the social fabric.⁵⁸ A medicine adequate to persons aids the always precarious, emerging coincidence of the biological and ecclesial modes of being.

Such a medicine certainly *includes* genomics, but significantly relocates and re-temporalises it.⁵⁹ As a result, EPM's dialectic may resolve into a sober hope. The service of healing as real 'patience-work' corresponds to it, and is not replaced by the 'proactive maintenance of health'.⁶⁰ Notably, *hype* is the opposite of events arduously unfolding in time: it propounds 'Mission Accomplished' by virtue of sheer declaration. But like the war to end all wars, a medicine to end all medicine denies the encounter with actual suffering. It denies human passibility. Christianity certainly regards death as the 'last enemy' (1 Cor. 15:26). Hence EPM appeals to the aversion against biological fatalism. But against all claims to scientific progress, a denial at all costs may well be a counter-factual maintenance of a status quo, a Heraclitean *stasis*—only to then regard death as a catastrophic failure of technology, again a sheer abyss. Medical care faces rather than postpones that abyss in continuous, patient engagement.

Like persons themselves, a sobered-up PM (SPM) is much less and much more than the hype suggests. No longer an ideology⁶¹ that offers a sufficient horizon for human flourishing, SPM can simply function as another diagnostic and therapeutic instrument. Those who have always seen PM in that way have rightly wondered why PM should raise anthropological concerns at all, or even be a distinct sphere of research. However, the narratives of advertised revolutions challenge institutionalised forms of medicine and redefine terms such as 'persons' or 'care'. Expensive measures, where not direct-toconsumer, are already heavily straining public healthcare budgets.⁶² Hence, a theological-existential language of personhood remains a 'stumbling block'.

- 61. Tiefensee, 'Zum Begriff der Ganzheitlichkeit'.
- 62. Julia Friedrichs, 'Verschreibungspflichtig', *ZEITmagazin* 2 (January 2016), p. 25, at http://www.zeit.de/zeit-magazin/2016/02/medikamente-krebs-hexavar-markt-neuheit-risiko.

^{58.} Cf. Jüngel, 'The Christian Understanding of Suffering', Journal of Theology for Southern Africa 65 (1988), pp. 3–13; Hannah Arendt: 'Only pain is completely independent of any object, only one who is in pain really senses nothing but himself', cit. in J. D. Katz, 'Pain Does Not Suffer Misprision: An Inquiry into the Presence and Absence that is Pain', Medical Humanities 30 (2004), pp. 59–62; on betrayal, see Havi Carel, Illness (Durham: Acumen, 2013), p. 46.

^{59.} Ontological location precedes 'ethics' in the narrow sense of decision-making; cf. e.g. Christoph Schwöbel, 'Human Being as Relational Being: Twelve Theses for a Christian Anthropology', in Christoph Schwöbel and Colin E. Gunton (eds), *Persons Divine and Human* (Edinburgh: T&T Clark, 1991), pp. 141–65, esp. 147–51; Dalferth, *Becoming Present*, p. 54; on the detemporalisation of disease in predictive medicine, Arnold Sauter and Katrin Gerlinger, *The Pharmacologically Improved Human: Performance-Enhancing Substances as a Social Challenge* (Berlin: Büro für Technikfolgen-Abschätzung beim Deutschen Bundestag, 2013), pp. 24, 200.

Bernd Wannenwetsch, *Gottesdienst als Lebensform* (Stuttgart: Kohlhammer, 1997), pp. 127–29; cf. also Gilles Châtelet, *To Live and Think Like Pigs: The Incitement of Envy and Boredom in Market Democracies* (Falmouth: Urbanomic, 2014 [1999]), pp. 149–50, 160.

Authority—Emergent Recognition

Who decides? The question of authority concerns not just politics. As noted, EPM champions the individual over against medical paternalism. However, as we saw, personhood as free *and* social complicates that view. The middle ground between an (industry-/insurance-driven) paternalism and consumer capriciousness must be regained in concrete clinical encounters, the *locus* of PM as sober medical practice. The concept of 'embodied autonomy' is highly relevant here: '... to experience myself as "I" within the world, presupposes feeling myself to be the body (*Leib*) I *am*'.⁶³ Moreover, if every person—to an extent—can be a theophany-in-humanity, the 'levelling' of authority between clinician and patient happens in personal encounters. The 'act' of listening here is not so much the muting of one autonomous individual (patient *or* clinician) whilst the other asserts their demands. Rather, witnessing to reconciliation, in listening to the other, waiting to reach out in word, sign and gesture, clinician and patient *become* persons. In responding to concrete manifestations with serious attention they allow for such an 'autonomy' in free relationality to emerge in the first place.⁶⁴

Particularly as direct-to-consumer genetic tests are on the rise, clinicians find themselves in the position of having to give reassurance rather than interventions that increase patients' alienation from their bodies (and thus also subvert clinicians' compassionate affections). Where digitalisation, big data, commercial interests and insurance pressures already pre-define or even populate the clinical relationship, those involved disintegrate: into individual bodies, resalable entities within networked 'control societies' (Deleuze).

Moreover, since personhood is the continuous event of being-in-relation, a soberedup PM is intrinsically public, growing out of and operating within a public healthcare system (and not just the church); it responds to physical suffering as a social division.⁶⁵ SPM emerges from structures of welfare justice, not vice versa.⁶⁶ This side-lines the biotech industry and the *homo economicus*, and critically contextualises the current situation: commissioners are confronted with expensive innovations, but left alone with the task of integrating them into public healthcare.

^{63.} Wabel, 'Patient as Person', p. 60; original emphasis.

^{64.} See also O'Donovan, 'Again, Who is a Person?'; Markus Zimmermann-Acklin, *Bioethik in theologischer Perspektive: Grundlagen, Methoden, Bereiche* (Freiburg: Academic Press Fribourg; Freiburg: Herder, 2010), pp. 387–88.

^{65.} Cf. Wolf H. Rogowski, Scott. D. Grosse, Jörg Schmidtke and Georg Marckmann, 'Criteria for Fairly Allocating Scarce Health-Care Resources to Genetic Tests: Which Matter Most?', in Vollmann *et al.* (eds), *The Ethics of Personalised Medicine*, pp. 211–230. Paradoxically then, the most well-pampered private patient may be deprived of true compassion, which reintegrates him into social togetherness.

^{66.} Rogowski *et al.* argue that health and the need for intervention should be the guiding principle of PM resource allocation, rather than the welfarist principle of consumer preference or 'equity' in so far as it lacks *clinically* differentiated content. Rogowski *et al.*, 'Criteria for Fairly Allocating Scarce Health-Care Resources', pp. 211–30.

Discrimination—Discerning the Necessary

Discrimination means to intend to separate the innocent from the guilty; guilt is established by the 'direct material co-operation in the doing of wrong'.⁶⁷ In medicine, 'discrimination' means to target the disease with the intention to heal in so far as disease and its effects as illness and pain directly contribute to the division of the person. Considering that PM promises to *reduce* indiscriminate 'one-size-fits-all' treatments, one might wonder why a lack of discrimination should at all be a problem here. Treatments that replace 'nuclear', 'scorched-earth' or ineffective interventions, i.e. a *stratified* medicine, surely can only be welcomed.

Based on the anthropological difference between EPM and SPM, a sharp demarcation line runs between stratification and the lofty, predictive and preventive promises of '4P'-medicine.⁶⁸ Groundless testing introduces again an abysmal crack into the healthy person, an *alter ego* or 'sick personality', the (already diseased) 'genetic person'. Once total surveillance suggests total suspicion, the 'one-size-fits-all' approach is repeated on the individual level: the body becomes an indiscriminate battlefield; risks are reified and treated where other responses may be indicated.⁶⁹ The intention to mend the person-aspatient, the *proprium* of medicine, gets lost here.

Presuming the healthy integrity of persons, no matter how precarious, mandates genetic surveillance only where there are clinical reasons to believe a disease will become manifest as illness—i.e. as concrete persons emerge and endure throughout time.⁷⁰ Again a political parallel: a government may gather comprehensive intelligence in order to target a foreign dictator. But first they need to have an indication that *that* dictator is the enemy, not anyone or everyone else. By the same token, it may be adequate, even mandatory, to withhold medical treatment merely based on someone's genetic risk factors. On the surface that may well violate 'patient autonomy'.

Conversely, failing to make use of PM where possible is also indiscriminate. Arguments that PM should be available merely because it is 'innovative' or (still) part of an EU-framework miss this point. The fact that some tests, for example for BRCA mutations, are not as widely available as they could be, and the distinct possibility that PM is only for the wealthy may be examples of, respectively, random and elitist discrimination. Particularly if coupled with an embrace of suffering (preferably *other* people's) in the

- 69. Cf. e.g. Antonie Meixel, Elena Yanchar and Adriane Fugh-Berman, 'Hypoactive Sexual Desire Disorder: Inventing a Disease to Sell Low Libido', *Journal of Medical Ethics* 41 (2015), pp. 859–62. Prenatal diagnosis and termination of pregnancies based on genetic 'inadequacy'. Cf. Peter Singer, 'The Mixed Blessing of Genetic Choice', Project Syndicate, September, 2006, available at: https://www.utilitarian.net/singer/by/200609–.htm
- Cf. Amy L. Fairchild and David Merrit Jones, 'Health Surveillance, Ethics of', in Hugh LaFollette (ed.), *The International Encyclopedia of Ethics* (Oxford: Wiley-Blackwell, 2013), vol. IV, pp. 2353–2358.

^{67.} Oliver O'Donovan, *The Just War Revisited* (Cambridge: Cambridge University Press, 2003), p. 36.

^{68.} This difference was also still unclear at the Forum at the Medical Sciences Academy on 12 May 2015: 'Stratified, personalised or P4 medicine: a new direction for placing the patient at the centre of healthcare and health education (May 2015)', https://www.acmedsci.ac.uk/ viewFile/564091e072d41.pdf, pp. 18–19.

name of a Christianity that Nietzsche chided so well, compassion for those excluded by EPM is turned on its head. These possibilities are the result of a lack of discrimination, the molecular targeting of diseases that affect persons as social-communal beings.

Proportionality—Doing What's Feasible

If discriminate clinical judgment can be seen as a matter of intention, then proportionality 'has to do with the rational form which such an act assumes, i.e. with the successful act of judgment', O'Donovan writes on the use of force.⁷¹ Analogously, medical interventions need to be adequate to the aim they can realistically achieve.

Proportionality has a retrospective and a prospective aspect. First, the retrospection: Hugo Grotius—one of the first proponents of a public healthcare system—suggested that only an *iniuria accepta*, a received injury, warrants response. Mere suspicion or 'risk' does not warrant an intervention (in Grotius' case: military), because it is always costly. Preventive 'invasion', the treatment of a pre-disease 'risk state' as if it *was* a disease, is flat-out disproportionate. At least Grotius thus expressed allowance for contingency: 'For protection against uncertain fears we must rely on divine providence and on a wariness free of reproach, not on force.'⁷² Not only does that entail that a need for flexible responses, but also what O'Donovan calls a 'descriptive responsibility: ... what is *undertaken* must correspond to what is *purposed*, and what is *purposed* must correspond to what is *reasonably complained of*'.⁷³ Nonetheless, the *iniuria accepta* by no means needs to be an *iniuria perfecta*.⁷⁴ Reactive medicine need not be literally reactive. The risk of a person's disease can amount to inevitability, so that supportive intervention is pre-emptive rather than preventive.

But another possible retrospective (dis-)proportion relates to this: funding prestigious, expensive research at the expense of offering affordable conventional therapies, sufficient medical and caring staff.⁷⁵ What good is the best targeted therapy, if patients on the ward are treated like 'numbers in a concentration camp', as a nurse complained at a Royal Society of Medicine (RSM) meeting in 2015? The 'revolution' of PM thus may well be a crisis one shouldn't let go to waste. Instead of merely re-moralising healthcare professionals, sobering-up PM implies re-proportioning existing organisational structures and funds towards the effective and necessary care for persons. The present analysis thus well connects to some central concerns of social medicine.

Second, what is the aim of a medical intervention *in concreto*? If the end of a political act is a concrete peace settlement, the end of a medical act is the patient's health as reasonably achievable. In politics, forward-looking disproportion may creep in when military *victory* becomes the aim, rather than a possible mere means by which to achieve a

^{71.} O'Donovan, Just War Revisited, p. 48.

^{72.} Grotius cit. in O'Donovan, Just War Revisited, p. 49.

^{73.} O'Donovan, Just War Revisited, p. 52; original emphasis or added.

Hugo Grotius, De Iure 2.1.5, cit. in O'Donovan, Just War Revisited, p. 172; Kollek and Lemke, Der medizinische Blick in die Zukunft, pp. 120–21.

^{75.} Laura Donnelly, 'A&E now "overwhelmed" says top doc as he calls for army of medics to be sent in', *The Telegraph*, 16 March 2016; Charlie Cooper, 'Under-staffed hospital A&E's request for help from military medics turned down', *The Independent*, 23 April 2016.

concrete peace settlement.⁷⁶ Analogously, biotechnological triumph can become an end in itself—especially so when research and development is tied to the imperative of economic growth in the midst of post-industrial decline. The ancient apocalyptic forces of death versus God here are replaced by the late-modern struggle of man versus machine. Patient and disease are conflated in an antagonistic, dualistic battle against death which no one can win. Transhumanism is one way to reconcile the opposites, a latter-day incarnation of machine into man. But *pace* some theologians, this is more of a parody of the Incarnation rather than a genuine correspondence (*Entsprechung*).⁷⁷

Forward-looking proportion means measuring the risk of failure and benefit. It is the task of proportioning an action in relation to its end. What is a reasonable end, for example in terminal cancer? Are invasive, cost-intensive interventions with a small chance of two additional weeks of life 'appropriate'? 'Proportion is, indeed, *always* the decisive argument in bringing conflict to an end',⁷⁸ either because everything is lost—or won. In determining medical ends and proportionate means, both implications of EPM are again to be avoided: the Charybdis of death-denying wellbeing, and the Scylla of prematurely abandoning patients. Especially this last will become an issue with further resource constraints on healthcare budgets. Not all of them are 'natural': *they* imply theological-medical anthropologies, too.

Conclusion

Personalised Medicine is a set of technologies promising early diagnosis, molecular stratification and precision-medicines. The 'person' and a deep concern for individuals are invoked by PM enthusiasts and sober pragmatists alike. However, beyond the *sto-icheia* of biomedical reduction, Foucauldian technologies of the self, and a dissolution of the human into data packages, persons are ontologically and epistemologically excessive, even as they are unique. Emerging throughout time, persons are geared towards a holistic integrity of *shalom* that escapes analysis. In line with such an ontological logic of reconciliation, personhood is the standard by which helpful uses of PM can be discerned from hype, unrealistic expectations and quackery. If geared towards persons, PM technologies can be part of medicine as patience-work. Such discernment need not reinvent the wheel, but can learn from other fields of applied ethics.

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O'Donovan, Just War Revisited, p. 59. Cf. Barack Obama, State of the Union Address, January 2016, at https://www.whitehouse.gov/the-press-office/2016/01/12/remarks-presidentbarack-obama-%E2%80%93-prepared-delivery-state-union-address.

^{77.} Wolfgang Huber, Torsten Meireis and Hans-Richard Reuter (eds), *Handbuch der Evangelischen Ethik* (Munich: C.H. Beck, 2015), pp. 569–71.

^{78.} O'Donovan, Just War Revisited, p. 61; original emphasis.