

Is euthanasia of the infant born at 22⁺⁰-23⁺⁶ weeks' gestation (without congenital anomalies) morally permissible within the United Kingdom?

Examination number: B120493

Word count: 8000

MSc Philosophy (taught)

The University of Edinburgh

2018

Table of Contents

Introduction	2
Section One	4
Personhood	4
Singer's criterion for personhood (1)	4
Personhood and the suffering infant	7
The distribution of healthcare resources	8
Familial interests (1)	9
Section Two	11
Singer's criterion for personhood (2)	11
The socio-economic value of disabled infants	13
Familial interests (2)	14
Disability-selective infanticide for parental convenience	16
Infant suffering	18
Section Three	19
An alternative criterion for personhood	19
Conclusion	21
References	23

Introduction

Modern biomedical technology provides the ability to sustain the lives of extremely premature infants1 (EPIs) that would have died soon after delivery only decades ago (Roberts, Cronin, and Todres, 2001: 294). This ability has transformed the landscape of moral decision-making in neonatology. The infant (without congenital anomalies) born at ≥24⁺⁰ weeks' gestation is legally considered viable² within the United Kingdom (UK); accordingly, that infant will receive the entire armamentarium of neonatal intensive care. However, infants born on the cusp of legal viability (22+0-23+6 weeks' gestation) bear no legal entitlement to this care and withholding treatment from these infants is a widely accepted medical practice (BBC, 2010; Lantos and Meadow, 2006: 109). Acceptance of passive euthanasia under this condition is dictated largely by the overall inverse relationship between gestational age at birth and risk of morbidity3. This acceptance has become one of the great ethical controversies of the 21st century, amplified by the theory that periviability within developed countries now sits at 22+0 weeks' gestation, and physicians' unwillingness to actively treat EPIs based on their poor prognosis is impacting statistical outcomes of prematurity and therefore skewing our knowledge of viability (Smith et al., 2012). In 1990, Japan reduced its legal threshold of viability to 22+0 weeks' gestation in accordance with this theory (Sakota, 2012: 218; Terao, 2012: 209). Since the 1960s, paediatricians have sought the moral analysis of philosophers to help resolve the ethical quandaries innovative neonatal technology has brought with it (Lantos and Meadow, 2006: 37). Here we find another question raised: Is euthanising an EPI morally permissible because she bears long-term prognostic uncertainty? If not, the UK's legal limit of viability ought to be reduced to 22⁺⁰ weeks' gestation to reflect this.

_

¹ An infant born at <28⁺⁰ weeks' gestation is defined as *extremely premature* (World Health Organisation, 2018).

 $^{^2}$ Viability is often defined as the gestational age at which there is ≥50% chance of extrauterine survival (Glass et al., 2015). Legal abortions are available at <24 $^{+0}$ weeks' gestation in England, Wales and Scotland, as this is the point at which the foetus becomes legally viable (Abortion Act 1967: 1a; House of Commons, 2007: 13). Reducing the legal limit of viability will impact abortion policy; however, the arguments for and against this outcome are too large to discuss within this paper.

³ Morbidities often associated with extreme prematurity include cognitive and physical types, such as: cerebral palsy, chronic lung disease, severe visual and/or hearing impairment, attention deficit hyperactivity disorder, and cognitive developmental delay (Church, Cavanagh, and Shah, 2016; Glass et al., 2015).

The contemporary moral philosopher Peter Singer (2017; Singer and Kuhse, 2002) has addressed the ethics surrounding medical infanticide within developed countries. Singer argues that infanticide is equivalent to preventing a person from existing, as opposed to killing a person. This claim is built on a simple dictum: that the infant is not a person, therefore her life does not bear the same moral value as that of the average older child or adult. Singer conjoins this thesis with other factors that he feels negate an infant's entitlement to life to argue that her euthanasia is ethically permissible under certain conditions; such conditions include being in a state of suffering, disabled, and/or unwanted by parents. As neonates born at 22⁺⁰-23⁺⁶ weeks' gestation suffer via commonplace practices within the Neonatal Intensive Care Unit (NICU) and are likely to bear morbidities as an outcome of their extreme prematurity, Singer's thesis is applicable to this group. By *Section One* of this paper I outline Singer's philosophies concerning the treatment of these infants.

Within *Section Two* I address Singer's arguments, to which I raise a set of criticisms and defend the moral worth of EPIs. I reject Singer's definition of personhood on the premise that it is radically chauvinistic and denigrates the existence of a vast number of human beings who have the potential to become valuable members of both their families and society. Further, society's dehumanisation of the infant and acceptance of infanticide for the sake of parental convenience could have dire consequences for the overall well-being of parents who adopt this ideology, their children, and disabled members of society. I agree that medical infanticide is acceptable in instances where an infant is in constant physical pain as an outcome of an ongoing medical condition, but as the EPI without congenital anomalies is not subject to this, this concept does not apply to her.

I believe that a good criterion for personhood should not be based on a list of psychological properties. By *Section Three* of this paper I put forward an alternative criterion based on an individual's capacity to bestow goodness on the world, as I feel that there should be an inverse relationship between this capacity and worthiness of moral consideration. This criterion ascribes person status to a much wider group than Singer's (including those neonates born on the cusp of legal viability), and accordingly an entitlement to legal protection.

Section One

Personhood

Metaphysically, personhood is a term that has stirred much debate amongst those philosophers concerned with bioethics and has acquired a plethora of definitions (Cranford and Smith, 1987; Frankfurt, 1971; Raz, 2006; Watson, 1987), with some bearing great respect within both philosophical and wider communities. Person status is a privilege as it commonly equates to a greater entitlement to moral consideration than those lacking it. During the 1920s and 1930s in North America, both physically and mentally disabled people had minimal protection as they were not viewed as deserving of it. These individuals were institutionalised to maintain segregation, sterilised via a legal eugenics programme, and generally demonised (Jensen-Moulton, 2012: 130-131; Snyder and Mitchell, 2006: x). Whilst the term *person* may not have been symbolic of higher worthiness of moral consideration at the time, this historical excerpt is phenomenological evidence of how human life is not always considered to be of absolute value; being biologically human does not necessarily mean that one bears qualities associated with humanness. The disparity created between these two groups on the premise of moral worth bears a strong likeness to how the term *person* might be utilised today. In present times we may infringe on a murderer's prima facie right to be treated as a person (for instance where capital punishment is sanctioned) by considering their criminal actions on trial and concluding that they lack qualities necessary to maintain person status. Thus, they are deemed less worthy of moral consideration than the average human. It is important that the philosophical community explicates the concept of personhood so that the best definition may be relayed to the wider population, and sentient beings treated in accordance with their true moral value.

Singer's criterion for personhood (1)

Within *Practical Ethics* (2017: 73-83) Singer constructs a definition of *personhood*, building his thesis on Joseph Fletcher's (1972) definition of *humanhood*⁴ (which is not based on biology), and John Locke's ([1690] 1836: 225) *theory of personal identity*, which claims that a person is: *a thinking*

⁴ The theologist Joseph Fletcher (1972: 1-2) compiled a list of *Indicators of Humanhood*. This criterion includes: an Intelligence Quotient ≥40, self-awareness, self-control, a sense of time, and a sense of continued existence.

intelligent being that has reason and reflection and can consider itself as itself, the same thinking thing, in different times and places.

Locke's definition selects two crucial criteria for personhood: *rationality* and *self-awareness*, as the heart of the notion. Singer adopts these criteria; however, he does not follow Locke ([1690] 1836: 24-29) in granting the same degree of moral consideration to the human being when she is considered in distinction from the person. For Singer, beings with the most moral value (and therefore an entitlement to life) conform to his criterion for personhood, something the neonate does not. Hence, Singer's criterion for personhood is central to his thesis that infanticide is morally permissible under a broad set of circumstances. Singer (2017: 75-83) outlines four characteristics that he feels a person ought to have; these characteristics delineate why it is worse to kill persons than non-persons, arguing for a two-tiered morality between these groups.

The first characteristic is *self-consciousness*: being aware of oneself as a distinct entity existing over time (Singer, 2017: 76). From this characteristic the second stems: having *forward-looking desires*; Singer (2017: 77-78) relies on utilitarianist narratives to justify this posture. The classical hedonistic utilitarian⁵ might argue that if a person thinks that they are likely to be killed at any moment and against their wishes, that person's present existence will be fraught with consternation. By allowing a policy of homicide, we negatively impact the happiness of living persons. The hedonistic utilitarian can therefore defend a ban on killing those with forward-looking desires as it enables the contentment of people who would otherwise worry that their life might be ended much sooner than they had initially anticipated (Singer and Kuhse, 2002: 152). Neonates are *merely conscious* (Singer, 2017: 85), and therefore not afraid of dying via a policy of infanticide, as they do not have the mental capacity to understand such a policy or fear death. If a policy of infanticide were implemented, no person would fear her own death as the policy would be clearly aimed at infants.

Preference utilitarianism judges actions by their propensity to gratify preferences made with full exposure to the relevant facts, and therefore maximise utility via a method of critical moral reasoning (Hare, 1981: 101-105). However, in life one cannot usually foresee all the complexities of significant choices, and there may be additional factors that prevent the best

⁵ Classical hedonistic utilitarianism judges actions by their tendency to maximise joy and minimise pain or misery (Singer, 2017: 76).

verdict from being made (such as being hurried to make a decision or having rationality compromised by emotion). Thus, it can be highly impractical to try to calculate the outcomes of every important moral decision. Accordingly, Hare (1981: 101-105) asserts that society should adopt broad moral principles that history has shown to be generally conducive to producing the best outcomes. Critically, one can conceive of circumstances where better consequences would flow from acting against this type of principle. However, Hare argues that people will do better *overall* if they adhere to relevant well-guided intuitive principles when making morally significant decisions. For preference utilitarians, wrong is done when a preference has been thwarted, such as the preference to live. Further, killing the individual who is extremely future-orientated in her preferences, with desires and plans, will violate the most significant preferences she has, and disregard any efforts made throughout life for the sake of her desires (Singer, 2017: 77-80). Hence, from a preference utilitarian perspective, respecting the lives of individuals with forward-looking desires should be among these broad intuitive principles. The neonate lacks a sense of futurity and therefore does not have any preferences about her continued existence; this characteristic does not apply to her.

Singer's (2017: 81-83) third characteristic is the *desire to continue living*, for which he leans heavily on Michael Tooley's works *Abortion and Infanticide* (1972, 1983) for support. Tooley (1983) claims that to have a right to life, one must have the capacity to conceive of herself as existing over time, and is of such a kind that it can now be in her interests that she continues to exist. Continued existence cannot be in the interests of an infant, as she is not a temporal being with the desire to live; she is not conscious of any potential future existence and therefore cannot envisage it. Tooley and Singer agree that the retrospective attribution of an interest in living to the infant is erroneous; due to the phenomenon of infantile amnesia there is no mental link between the person and their infant-self *and in this crucial sense we are not, and never were [infants]* (Singer and Kuhse, 2002: 241). It then follows that the infant is less worthy of a continued existence than the person who values it.

The final characteristic is *autonomy*. Singer (2017: 83-84) endorses a form of thought associated with Kantian ethics⁶, by which respect for autonomy is a rudimentary moral principle.

-

⁶ Kant ([1798] 2007: 239) argued that as the human being can have the representation "I"[, this] raises him infinitely above all other beings on Earth.

Rational and self-aware beings have autonomy, and can therefore self-govern, choosing to live via their understanding of the difference between dying and continuing to live. As this choice is the most fundamental personal decision one can make (as all other choices depend upon it), ending the life of an individual who does not wish to die is the gravest possible violation of that individual's autonomy. The neonate is thoroughly governed by heteronomy, therefore this characteristic does not apply to her.

As neonates cannot exhibit any of these four characteristics, Singer concludes that they should not be ascribed person status. On Singer's (2017: 103) model, the loss of life of any infant is less morally significant than that of an older child or adult, to the extent that her death literally cancels out her life precisely because she cannot reflect on either. This indicates that infanticide is morally permissible if the hedonistic utilitarian calculus indicates that the infant's death will serve a larger good than her life, for instance if her death benefits her family or society.

Personhood and the suffering infant

If Singer's posture on personhood is to become normative, it has far-reaching consequences for our treatment of the infant born on the cusp of legal viability. Singer (2017: 50) believes that we must treat *all* sentient beings on the strict hedonistic utilitarian calculus of pain versus pleasure. In NICU, the EPI (regardless of whether she has morbidities) will encounter uncomfortable medical tests and needle sticks so that her health may be monitored (Harvard Medical School, 2011: 2), and she cannot be held due to epidermal fragility (Jurica et al., 2016: 24); her limited interests which include being comfortable and comforted cannot be attended to adequately (Singer and Kuhse, 2002: 241). As the death of the infant suffering under these conditions does not conflict with her desires *and* ends her suffering, Singer asserts that euthanising her is ethically permissible.

Proponents of the sanctity of human life may hold that as many infants born at 22⁺⁰-23⁺⁶ weeks' gestation bear the capacity to develop the intrinsic properties constituting personhood, life-sustaining treatment is in their best interests. To this, Singer and Kuhse' (2002: 240-241) response is that the potential personhood of the neonate is irrelevant if she is suffering. The infant is not a continuing mental-self, and is therefore distinct from the future person, bearing no interest in her continued existence. The fundamental issue should be the *best interests* of the infant,

and by sustaining her life during a period of suffering we are acting *despite* her interests for the benefit of someone else (the future person). The prospective enjoyment of a separate person who does not at present exist should not be factored into the hedonistic calculus by which we determine the suffering neonate's fate.

Some contend that we should provide life-sustaining treatment to neonates on the premise that as they are not continuing selves, then it follows that they can neither remember past experiences nor anticipate future ones, so their suffering is irrelevant (Page, 2004). Singer and Kuhse (2002: 240-241) refute this justification, asserting that a non-person's momentary suffering should always be viewed as morally equivalent to that of a person, despite the person's ability to anticipate and remember unpleasant experiences raising additional considerations. All sentient beings should bear entitlement to this basic degree of moral consideration (Singer, 2017: 50).

The distribution of healthcare resources

Taking the principle of equal consideration of interests further, Singer and Kuhse (2002: 281) assert: when we spend money from the public purse on health care, we should try to get value for money. Their posture is that it is necessary to use cost-effectiveness analyses for the distribution of healthcare resources to weigh the possible benefits of different treatments and programmes (Singer and Kuhse, 2002: 271-272). Some argue that cost should be considered irrelevant where human life is at stake, however, Singer's standpoint can be justified as even developed countries have limited financial resources. Neonatal intensive care sits amongst the most expensive hospitalisations; the total cost of preterm birth to the public sector was approximately £3 billion in England and Wales in 2006 (Lantos and Meadow, 2006: 38–42; Mangham et al., 2009). Singer and Kuhse (2002: 274) endorse quality-adjusted life years⁷ (QALYs) to determine who bears priority in the allocation of healthcare resources. This method of analysis favours infants as they typically have more years ahead of them, whilst those patients with person status (by Singer's criterion) are frequently elderly or seeking treatments that only briefly extend their lives (factors which limit QALY scores and therefore the likelihood of receiving treatment). For instance, Avastin is a

⁷ *QALY*s determine the overall benefit of a treatment by combining the length of survival it provides with an evaluation of the quality of the additional life years gained (Singer and Kuhse, 2002: 272).

drug that can provide the advanced ovarian cancer patient an extra nine months' survival time, however, as this time is less than one year and the drug is expensive, a patient in need of Avastin will have a very low QALY score (Target Ovarian Cancer, 2015). Self-determining autonomous patients have an interest in receiving treatment because they want to continue living and/or experience a better quality of life, unlike infants who live primarily in the moment and have no long-term desires (Singer and Kuhse, 2002: 274); treatment does not benefit the infant to a greater degree than a painless death. Hence, Singer argues that neonates should be excluded from this method of analysis as the medical needs of persons wanting treatment ought not to go unheeded because NICU takes precedence in the provision of healthcare resources.

Familial interests (1)

In Practical Ethics (2017: 160-167), Singer grants that the value of an infant's life should be largely measurable to the extent that her family welcomes her, positing that infanticide is morally permissible even where *mild* disability is forecast if it is in the family's interests. The ground this claim is made on is that the burden of the morbidity is not the infant's, but her family's. Singer and Kuhse (2002: 243) argue that to disregard the interests of all those impacted by the neonate's continued existence is incompatible with the principle of equal consideration of interests8, which Singer (2017: 20-24) feels is fundamental to making ethical decisions. By this principle, the interests of an autonomous self-aware being automatically achieve greater weight within a hedonistic calculus than any pleasure the non-person may take in life (Singer, 2017: 65). By this method of principled thought Singer (2017: 178-180) advocates that infanticide can be morally permissible for neonates suffering with Down Syndrome (DS) (whom he admits will typically lead enjoyable lives), on the premise that a disabled child can be too much of a burden for parents. Singer (2017: 162-164) even exonerates the infanticide of haemophiliacs, despite recognising that this condition (Type A and Type B) can be effectively treated, and most haemophiliacs are not greatly impacted by the condition's raw symptoms (National Health Service, 2017a).

To reinforce this argument, Singer and Kuhse (2002: 218) discuss a case history demonstrating the negative impact that the disabled neonate may have on her family. The case

⁸ The *principle of equal consideration of interests* holds that in any situation where a decision is necessary, the interests of all those affected by the decision should be considered equally (Singer, 2017: 20).

history is taken from Anthony Shaw's (1973) article *Dilemmas of Informed Consent in Children*, and centres on an infant born with DS, a heart condition, and intestinal obstruction. The intestinal obstruction and heart condition were life-threatening but could be operated on, providing the infant with an opportunity to live. The neonate's mother refused to consent to the surgery, on the basis that she would be unable to provide adequate care to a child with DS. The local child welfare agency responded to this decision by obtaining a court order directing that the surgery take place. Post-surgery the infant was returned to her mother. In addition to her limited cognitive abilities, the infant's physical development remained markedly abnormal as an outcome of cardiac disease. When the infant was 18 months old, a follow-up enquiry found that her mother felt she had been handed an injustice by the court's ruling. Singer sympathises with the mother, agreeing with this sentiment; as the neonate's interests are purely to be comfortable in the present moment and pre-surgery this infant was suffering due to her physical condition, both the infant's and her mother's interests could have been satisfied via her death.

Section Two

Singer's criterion for personhood (2)

I feel that Singer's two-tiered criterion for personhood relies on an oppressive and chauvinistic narrative, and to illustrate why I provide the following thought experiment. Imagine Earth is discovered by Martians who would like to inhabit it; these Martians have cognitive capacities that exceed those of Homo sapiens and all other Earthlings exponentially. There are facets to Martian existence that are incomprehensible to humans and make Singer's four necessary conditions for personhood look primitive. The Martians apply a similar strand of ethical thought to Singer, delineating key differences between Earthlings and their selves to create a two-tiered model. By this model humans are not persons and are therefore less worthy of life than the Martians (who have accordingly granted themselves person status). The Martians believe that it is morally permissible to euthanise 50% of the human population at a single point in time, as Earth is over-populated by humans and our pollution is destroying the planet. They achieve this conclusion via hedonistic calculus; over-population by humans will ultimately prevent both Martians and Earthlings from inhabiting the planet comfortably, thus it is beneficial to all inhabitants that the human population is reduced. The Martians use their superior cognitive abilities to achieve these deaths instantaneously and painlessly, and without any human knowing that this homicide had been organised, so that Singer's (2017: 78) hedonistic utilitarian argument was alleviated with his agreement.

The Martians acknowledge that remaining humans will be unhappy that some of their peers have died and that they might have benefitted from their continued existence. For instance, the death of an individual heavily involved in the promotion of peace negotiations between countries could have a detrimental impact on the futures of millions of people. On a more personal level, some remaining humans will experience chronic bereavement-related depression by the deaths of loved ones (Maj, 2012). However, as the Martians are entitled to greater moral consideration due to their person status and take pleasure in the concept of a healthy Earth, Martian happiness morally supersedes any goodness that the deceased humans may have bestowed in life.

What the Martians have done has been justified by an oppressive narrative. Instead of using their superior cognitive abilities to find ways to save Earth without inflicting a mass homicide, the Martians have opted to euthanise humans, feeling that this is morally permissible under certain conditions due to our non-person status (on their view). The Martians refuse to acknowledge that our lives do matter to us, claiming that the reasoning behind the moral worth we entitle ourselves to is flawed, as we do not have those important psychological properties that Martians assert are necessary for a being to be worthy of life. This thought experiment demonstrates how by assuming a greater entitlement to life based on a specific set of cognitive abilities, we are rooting this entitlement in ignorance and an unwillingness to alter the world so that it may accommodate everyone. Just because another sentient being does not think precisely as we do, this does not mean that they are any less worthy of life.

Alison Gopnik (2009: 110, 131), a developmental psychologist and specialist in the philosophy of mind, highlights that infants are by some measures more conscious than human adults, but their awareness is constituted by a kind of consciousness that is infant-specific and directed at learning as opposed to narrowly defined tasks (Pascalis, de Haan, and Nelson: 2002). An empirical study conducted in 2013 found that the phonetic perception of neonates is impacted by exposure to ambient language from 30 weeks' in utero, and therefore the foetus/neonate is remembering and learning from at least 30 weeks' post-conception (Moon, Lagercrantz, and Kuhl, 2013). This outcome was a breakthrough in developmental psychology, and whilst it does not encompass foetuses/neonates prior to 30 weeks' post-conception, there is still a great deal of research to be carried out in this field which might demonstrate even earlier learning. The neonate's focus on learning serves as a means of developing the characteristics required to find clarity in her experience so that she may ultimately continue it. By seeking these characteristics via the distinct form of consciousness evolution has bequeathed to her, the neonate is exhibiting an inherent willingness to continue living. She might not be choosing to live in Singer's required sense as she is not self-aware, but I feel that this must be acknowledged and warrant consideration in the provision of healthcare resources.

The socio-economic value of disabled infants

Singer posits that the interests of the general population must be considered from an economic perspective when allocating healthcare resources. As infants are not persons in Singer's eyes (and therefore do not benefit from the gifting of a continued existence), he feels that this section of the population should be eliminated from typical cost-analyses designed to fairly distribute these resources. Singer and Kuhse (2002: 228-231) argue that throughout the course of human history by every level of cultural complexity, disability-selective infanticide has been practised, and this has tended to support familial and societal utilitarianism. By combining Singer's views of the neonate's moral entitlement to healthcare resources with the utilitarianism past infanticides have supported and the principles of preference utilitarianism, it is intuitively conducive to withhold life-sustaining care from the neonate on the cusp of legal viability as a general rule.

It seems unreasonable to assume an ethical principle for this situation that is formed on past events, as many historical events and beliefs were rooted in prejudice and ignorance. We see this by the aforementioned treatment of disabled people in 1920-1930 North America. We know that even the most cognitively impaired individuals (of varying diagnoses) are capable of significantly more than what has been previously assumed, and what is still assumed by some (Kittay, 2009: 616-617). Cognitively impaired individuals often bear many psychological qualities of the cognitively intact, but simply process information via different methods and to different capacities. Some employers and educational institutions have embraced disability; they actively gain knowledge of the challenges that disabled people face, and utilise this knowledge in ways that demonstrate how even the severely disabled can be assets to society9. The EPI's continued existence may not benefit her, but it has the potential to benefit society regardless of whether she develops a long-term disability. An example of a specialist training college which nurtures the abilities of cognitively disabled young adults is Foxes Academy (2017), where students are taught the skills of the hotel trade by methods aligned to their individual needs. Students at the college have conditions including DS, autism, cerebral palsy and mental illness, and 88% of leavers in the past five years have achieved employment. Moreover, 85% of Foxes Academy leavers go on to live semi-independently via the college's training. Many people with physical impairments

⁹ A 2014 report (Assis et al.: 5) assessing the value of DS employees in the workplace found these employees to improve *organisational health* dimensions of the workplace, including *leadership* and *client satisfaction*.

such as blindness become disabled not by the intrinsic nature of their impairment, but because of physical and social constructions that become a barrier to living independent lives (Kittay, Jennings, and Wasunna, 2005: 457). The Soap Co. (2018) is a prime example of a brand taking heed of this notion by allowing guide dogs into their factory and office to support their blind employees. Despite the abundance of evidence proving that many disabled individuals add value to the workplace, 2016 UK employment statistics showed that 51% of disabled individuals of working age were economically inactive, compared to only 19% of non-disabled individuals (Office for National Statistics, 2018a; Parliament, 2017). Whilst this demonstrates an improvement when compared to previous UK employment statistics, the disparity between these groups illustrates a continuing need to address the barriers to work that many disabled people encounter.

It is immoral for society's general subscription to outdated views concerning the capabilities of disabled individuals to be placed on the shoulders of infants who are demonstrating an inherent desire to experience life. Therefore, we should view EPIs as potential assets to society (as they typically are) despite poor social attitudes towards disability. From a hedonistic perspective we should want the UK to experience economic prosperity as this inversely contributes to overall UK happiness and life satisfaction via improvements to services including the NHS (ONS, 2018: 11-12; 2013). Therefore, infants with long-term prognostic uncertainty should be entitled to life-sustaining care, as their continued existence has the potential to benefit the population.

Familial interests (2)

The birth of a premature infant is sudden and unexpected; the family does not have time to prepare for the situation or accept it (Roberts, Cronin, and Todres, 2001: 300). Studies have shown links between preterm birth and poor psychological functioning in affected parents, which include depression and difficulty in forming parental *attachment*¹⁰ (Flacking et al., 2012). Parents of an EPI who are affected by these psychology conditions are also met with the prospect of having to provide long-term care to a disabled dependent. This prospect may rouse wariness

_

¹⁰ *Attachment* may be defined as a *lasting psychological connectedness between human beings* (Bowlby, 1969: 194).

surrounding how much they may have to part with to provide an excellent standard of care, such as financial income, psychological well-being, and an equal distribution of attention between children (Hedderly, Baird, and McConachie, 2003). We see this in Singer's example of the mother who did not want her baby with DS to receive life-saving surgery. Singer is correct to suggest that the disabled dependent appears to threaten those called on to provide care, and from this perspective euthanasia of the infant who is highly likely to bear long-term disabilities has the potential to support familial well-being. However, empirical research has shown that many parents find raising a child with a severe disability rewarding after overcoming the initial shock of realising that disability (Cunningham, 2011: Ch.1; Gupta and Singhal, 2004: 30-31; Hastings and Taunt, 2002). Accordingly, the infant born on the cusp of legal viability could make a positive contribution to her family's quality of life regardless of her medical outcome.

In the Martian thought experiment, surviving humans cannot forget their dead peers, just as a family cannot pretend that their euthanised baby never existed, especially if a prenatal attachment had been formed with her. Neonatal death often presents as a major life crisis for parents, with far-reaching implications for their aspirations as a couple, including subsequent pregnancy (O'Leary, 2015). Adding neonatal loss (at the discretion of the parents) to the psychological trauma that accompanies preterm birth does not seem to support parental wellbeing in current times. If the EPI is euthanised due to quickly formed parental fears, retrospectively this may be a decision that the family regret as they discover that society is improving its support of the disabled (Harley et al., 2018: 444). As Singer endorses hedonistic utilitarianism, perhaps he should be arguing for better assistance for families with disabled dependents and greater awareness of the services and facilities that are already available to assist those impacted by disability. As time is not on the side of parents with an EPI, the bestowing of knowledge surrounding all the possible outcomes of the extremely premature condition and the services available to assist with each condition is impossible. Therefore, the kindest step may be to provide infants born at 22⁺⁰-23⁺⁶ weeks' gestation life-sustaining care as a general principle. In doing this, the choice to withhold care is taken out of the parents' hands, alongside potential regret over consenting to their baby's death, and the sadness that typically accompanies neonatal loss (O'Leary, 2015).

Disability-selective infanticide for parental convenience

In Iceland, screening for chromosomal disorders is offered as a general component of antenatal care, and coupled with Iceland's abortion policy¹¹ has played a role in making disability-selective medical terminations of pregnancy (usually of foetuses with DS) commonplace (Statistics Iceland, 2015: 11). Consequently, during the past ten years only two to three Icelandic children with DS have been born annually (Ministry of Welfare, 2017). This deleterious outcome increases the misery of those individuals living in Iceland who are personally affected by DS, by stunting the growth of DS awareness¹². This elimination even bears the undertones of a eugenics programme due to its outcomes; a strong prenatal attachment should not be punished (even if this is indirect) with the infliction of maternal anxiety because the foetus has DS. Similarly, the adult with DS should not be made to feel unwanted via a policy which bespeaks an intolerance on human variation by permitting the termination of any impaired foetus after the general limit. As every pregnancy bears the risk of producing a child with DS (NHS, 2017b), migration to Iceland continues to increase (SI, 2018), and chromosomal screening does not always detect abnormalities (Santorum et al., 2017), the country is unlikely to eradicate DS completely. Therefore, some individuals will always be negatively impacted by Iceland's abortion policy. Singer feels that all disabled infants and foetuses should be viewed as disposable at the discretion of their parents, begging the question: if society takes Singer's thesis as a gold standard for pre- and postnatal ethics, how far is society willing to take this elimination process when given free-reign over it? What Singer is endorsing paves the way to outcomes reflecting those that we have already seen in Iceland but on a much larger scale by including all disabilities.

Locke ([1690] 1836: 51-53) proposed that infants are born with a tabula rasa on which life experiences engrave their messages. I concur with this notion, but extend it to foetuses as life experiences impact them too (Moon, Lagercrantz, and Kuhl, 2013). Society's adoption of Singer's

¹¹ Iceland's abortion policy typically permits abortion at <16 weeks' gestation; however, this limit does not apply to cases where foetal impairment may be present (United Nations, 2002). The limit on abortion is also lifted by UK law where there is *substantial risk that if the child were born [she would be] seriously handicapped* (Abortion Act 1967: 1d); this condition is narrower than Iceland's and largely based on the foetus' prospective suffering, making it less discriminatory (Royal College of Obstetricians and Gynaecologists, 2010: viii).

¹² Lack of public awareness about the potential of disabled people imparts stress of a disabled infant's family, and forms a barrier to the acceptance and participation of disabled people within society (Gupta and Singhal, 2004: 30).

ideology will absolve prospective and new parents of any responsibility over their foetus/infant; if infants are viewed as replaceable and dehumanised by ascription of the same moral worth as dogs and rats, practises that are harmful to them could be deemed ethically permissible. For instance, consumption of alcohol during pregnancy by the mother may no longer be stigmatised as a baby with foetal alcohol syndrome can be euthanised and replaced. Lowering the moral worth of the foetus reduces the importance of early human development; this runs the risk of disorganising the transition to parenthood (for instance, how the mother perceives herself in relation to the foetus), which activates the prenatal attachment system (Meuti et al., 2015). Studies indicate that low prenatal attachment profiles correlate inversely with low postnatal attachment profiles and the adoption of parental roles (Pisoni et al., 2014; Dubber et al., 2014; Carneiro, Corboz-Warnery and Fivaz-Depeursinge, 2006). Thus, adhering to an ideology that disrupts parental attachment by lowering the moral value of foetuses/infants is likely to produce undesirable outcomes relating to parenting and the infant/childhood experience. For instance, many disabilities present or occur post-infancy; by severing the prenatal bond and making disability more unusal via the normalisation of disability-selective abortion and infanticide, it is highly likely that parents will be less accepting of the disabled child.

The hypothesis that negative social attitudes towards infants/foetuses can damage parental attachment is supported by anthropological research; one study reported that breastfeeding babies becoming "too [emotionally] attached" to their mother is a common negative attitude towards breastfeeding amongst Chinese populations (Diong, Johnson, and Langdon, 2000). This attitude resulted in decreased and shorter duration of breastfeeding despite awareness of its health benefits for the infant. We know that cultural beliefs and biopsychosocial factors can mould parenting beliefs and behaviour, and this empirical outcome demonstrates how social attitudes can damage postnatal attachment, with undesirable consequences via psychological and biological means; a strong postnatal attachment upsurges maternal happiness, and breastfeeding strengthens postnatal attachment (Chao, 2000; Diong, Johnson, and Langdon, 2000; Flacking, 2012; Li et al., 2005). Another study analysing a similar cohort found that too much close contact makes [some mothers] feel uncomfortable and therefore less inclined to breastfeed, demonstrating the impact of poor postnatal attachment on infant health (Schulze, Zhao and Young, 2009; 356). Conversely, many mothers choose to breastfeed to strengthen postnatal attachment as it inversely increases their happiness (Schulze, Zhao and Young, 2009; Diong, Dion

Johnson, and Langdon, 2000). Pragmatically, it is certainly worth encouraging society to ascribe high moral value to the infant as this improves her health and promotes maternal well-being by supporting parental attachment (Flacking, 2012).

Infant suffering

All infants experience discomfort regardless of their condition; the mere process of being born can be painful/uncomfortable for the infant (University of Rochester Medical Center, 2018), as is the administration of the Vitamin K injection most healthy infants in the UK receive within 24 hours of birth (NHS, 2018). Further, teething and infantile colic are prolonged painful experiences that infants commonly endure (NHS, 2016; 2015). Most do not consider these experiences a reasonable premise to end life on, yet Singer blankets all levels of suffering together, suggesting that it is reasonable to end the neonate's life at *any* point that she is uncomfortable as she is present-orientated, and her best interests are all that matter. Singer's belief system is unreasonable, as suffering plays a large role in the typical human existence, and at all ages. Thus, we must decide on a level of suffering that is morally acceptable for the infant to endure, so that those infants sitting below that threshold without legal entitlement to life-sustaining treatment are not disposed of for pure convenience.

I propose that if a neonate is experiencing unremitting physical pain due to an ongoing medical condition then it is reasonable to euthanise her. Under such conditions it is cruel to sustain an infant's life as it will be *constantly* miserable, and this significantly lowers its moral value. Further, it is upsetting for the infant's parents and those providing her care to have to witness such suffering. In these cases I agree with Singer's (2017: 186) thesis that active euthanasia is the kinder alternative to passive. In a medical setting these forms of euthanasia bear no intrinsic difference, but allowing an infant to waste away due to infection, hunger or dehydration imposes an additional and unnecessary cruelty on both her and those observing.

Section Three

An alternative criterion for personhood

Humans are generally highly sociable animals, therefore a human's happiness is largely dependent on how others impact them; we see by the Martian thought experiment that when a being dies, it is those that were affected by their life who are most impacted by their death. There are individuals who meet Singer's criterion for personhood and have conferred significant amounts of pain on the world, exceeding any good they have done. Many of these people bear great intelligence and self-awareness, utilising their present existence to fulfil abhorrent desires; their deaths will prospectively benefit others. Dangerous individuals should not be entitled to greater moral consideration than those who do not wish to inflict suffering. Singer's conditions for personhood are insufficient for a being to be worthy of moral consideration because there are factors that matter more to mankind than a set of cognitive abilities, such as the goodness that an individual imparts on the world.

In Situation Ethics: The New Morality ([1966] 2006: 57), Fletcher asserts: Only one 'thing' is intrinsically good, namely, love: nothing else. Love is the focus of Fletcher's statement, and in this context means desiring and acting to promote human welfare. However, I recommend that we focus on the concept of intrinsic goodness, making this the core feature of personhood, as sometimes people do awful things with good intentions¹³. I propose that a sentient being counts as a person to the extent to which that individual has the capacity to positively impact those around them. This definition of personhood sits as a spectrum as opposed to a two-tiered criterion, with a larger capacity to positively impact others ranking an individual higher on the personhood spectrum. By application of hedonistic calculus to this type of criterion, we must also consider the amount of intrinsic badness the subject holds, as this nullifies the equivalent volume

_

¹³ Many with good intentions act on them in ways that might not be welcomed by others. For instance, if a religious mother fears that her son will not enter Heaven because he is not heterosexual, by her intrinsic goodness she may seek therapy for him with the intention of altering this aspect of his identity. The key issue in situations such as this should be to eliminate factual errors and poor impressions of the world, as opposed to reducing the moral status of those that have fallen victim to them. If the mother held the belief that sexual preference bears no influence on admittance to Heaven or did not subscribe to religion, she would not have acted in this manner.

of intrinsic goodness. This criterion does carry some likeness to Singer's as it is not limited by the boundaries of species and has hedonistic focus.

A neonate's central psychological approach to the world focusses on learning, and this learning is centred on one primary attachment. One theory behind this is that the attachment figure (typically the infant's mother) acts as a safe base by which the infant can continue her learning behaviour, enhancing the infant's chance of survival (Bowlby, 1958). Hence, the neonate's output almost entirely reflects an intrinsic goodness, as it is centred on a bond which when facilitated can stimulate feelings of love, warmth and affection in her carer¹⁴ (Flacking et al., 2012). The neonate may not deliberately act to promote wellness and may even do the opposite depending on how she is received, but the fact that she can and inherently wants to form a postnatal attachment with her mother (due to evolutionary conditioning) entitles her to person status via this criterion. Ordering lives in a hierarchical manner via this criterion is difficult as we cannot read each other's thoughts, however, ascribing high moral worth to the infant is simple due to her special psychological status.

This criterion reflects society's values by discriminating against those persons who harbour thoughts and desires stemming from a malicious intrinsic nature; the UK's legal justice system penalises those who pose a danger to others. Some may argue that we should be sympathetic towards malicious people as their contempt for others may airse from their own misfortune, such as an unpleasant childhood or a personality disorder, therefore this criterion should be rejected. However, these excuses do not negate the fact that those ranking lowest on this personhood spectrum are the most ill-wishing members of our society, and should therefore be the least deserving of moral consideration. Further, on this model the moral worth of an individual is judged by their *current* intrinsic status, and therefore an individual's moral worth is malleable with self-improvement and self-deterioration.

¹⁴ Emotional closeness can be achieved without physical contact, and therefore this concept can be applied to the EPI who cannot be touched due to epidermal fragility (Flacking et al., 2012).

Conclusion

Singer's conditions for achieving person status are not necessary or sufficient for a being to be worthy of moral consideration; there are other qualities that deserve greater weight when determining the moral worth of a being. As human beings, we typically value the goodness that others bestow on us over their ability to act as autonomous or forward-looking agents, as every average human adult has these characteristics and many individuals use them to inflict suffering. Singer's four characteristics for personhood are not special, but intrinsic goodness and the capacity to positively impact others is. As the infant's existence centres on an attachment to her carer (which promotes the carer's happiness), the infant should be deemed worthy of moral consideration and therefore a moral entitlement to life. Further, ascribing moral worth by a set of cognitive conditions encourages a chauvinistic attitude with detrimental consequences. For instance, dehumanisation of the foetus/infant could easily damage parent-infant bonding and the health and happiness that emenates from it; we know that this relationship is vulnerable to societal attitudes and therefore Singer seems irresponsible for trying to reduce the infant's moral worth so significantly. Thus, Singer's criterion for personhood ought to be thrown out for one that ascribes the infant person status.

One cannot reach a substantial conclusion concerning whether it is morally permissible to euthanise the infant (without congenital anomalies) born at 22⁺⁰-23⁺⁶ weeks' gestation purely via a definition. Personhood is a connotative term and therefore is subject to individual interpretation. Whilst I feel that my definition of personhood is superior to Singer's, not everyone will agree with this as there are many factors that one may associate with worthiness of moral consideration. Yet, by coupling the moral reasoning by which I ascribe person status to infants with other factors defending the infant's moral worth, I feel that her moral entitlement to life-sustaining care can be adequately defended.

Permitting the euthanasia of EPIs at the discretion of their parents opens the door to regret combined with the pain of neonatal loss. Moreover, the neonate exhibits a desire to live via her special cognitive status which is centred on forming a bond with someone who will protect her. Thus, by euthanising her we are contradicting the very nature of her existence; her inherent focus on survival. The EPI also has the potential to contribute to societal well-being via contribution to the economy (at the very least), another factor contributing to her moral worth.

By ascribing the EPI person status by her intrinsic goodness and acknowledging the negative impact that euthanising the infant may have on her family, it seems sensible to conclude that the UK legal limit of viability should be reduced to 22⁺⁰ weeks' gestation. By this change in legislation, the burden of whether to withhold care from the EPI with no legal rights is no longer put on parents who are already in a poor psychological state via the experience of preterm birth. Moreover, by reducing this limit infants who automatically rank highly on a personhood criterion that is centred on one's intrinsic goodness are no longer treated as less deserving of life than those ranking below them. It may be argued that if this change is implemented there will be parents who resent it as they do not want risk having to care for a disabled dependent, and would have therefore wanted to euthanise her. To this, I refer to my criterion for personhood; those parents who bear the capacity to love and want their baby despite her prognostic uncertainty are worthier of greater moral consideration than those who will resent the fact that their baby was provided the opportunity to live.

References

- Abortion Act 1967.1. Available at: https://www.legislation.gov.uk/ukpga/1967/87/section/1 [Accessed 29 Jul. 2018].
- Assis, V., Frank, M., Bcheche, G. and Kuboiama, B. (2014). *The value that employees with Down Syndrome can add to organizations*. Public and Social Sector Practice. McKinsey & Company, p.6.
- BBC (2010). *BBC News Early baby survival rate 'static'*. [online] News.bbc.co.uk. Available at: http://news.bbc.co.uk/1/hi/health/8635955.stm [Accessed 29 Jul. 2018].
- Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of Psychoanalysis*, 39, pp.350-371.
- Bowlby, J. (1969). Attachment and loss: Volume 1. Loss. 1st ed. New York, N.Y.: Basic Books, p.194.
- Carneiro, C., Corboz-Warnery, A. and Fivaz-Depeursinge, E. (2006). The Prenatal Lausanne Trilogue Play: A New Observational Assessment Tool of the Prenatal Co-Parenting Alliance. *Infant Mental Health Journal*, 27(2), pp.207-228.
- Chao, R. (2000). The Parenting of Immigrant Chinese and European American Mothers. *Journal of Applied Developmental Psychology*, 21(2), pp.233-248.
- Church, P., Cavanagh, A. and Shah, V. (2016). Academic Challenges for the Preterm Infant: parent and educator perspectives. *Paediatrics & Child Health*, 21(5), p.e84.
- Cranford, R. and Smith, D. (1987). Consciousness: The Most Critical Moral (Constitutional)

 Standard for Human Personhood. *American Journal of Law and Medicine*, 13(2-3), pp.233-248.
- Cunningham, C. (2011). Down Syndrome. 3rd ed. London: Souvenir Press, p.Ch. 1.
- Diong, S., Johnson, M. and Langdon, R. (2000). Breastfeeding and Chinese mothers living in Australia. *Breastfeed Review*, 8(2), pp.17-23.
- Dubber, S., Reck, C., Müller, M. and Gawlik, S. (2014). Postpartum bonding: the role of perinatal depression, anxiety and maternal–fetal bonding during pregnancy. *Archives of Women's Mental Health*, 18(2), pp.187-195.

- Flacking, R., Lehtonen, L., Thomson, G., Axelin, A., Ahlqvist, S., Moran, V., Ewald, U. and Dykes, F. (2012). Closeness and separation in neonatal intensive care. *Acta Paediatrica*, 101(10), pp.1032-1037.
- Fletcher, J. (1972). Indicators of Humanhood: A Tentative Profile of Man. *The Hastings Center Report*, 2(5), pp.1-2.
- Fletcher, J. (1997). *Situation ethics*. Louisville: Westminster John Knox Press, p.57. (Original work published 1966).
- Foxes Academy (2017). [online] Foxesacademy.ac.uk. Available at: http://foxesacademy.ac.uk/wp-content/uploads/2017/10/Foxes-Academy-Prospectus-2017-web-1.pdf [Accessed 20 Jul. 2018].
- Frankfurt, H. (1971). Freedom of the Will and the Concept of a Person. *The Journal of Philosophy*, 68(1), pp.5-20.
- Glass, H., Costarino, A., Stayer, S., Brett, C., Cladis, F. and Davis, P. (2015). Outcomes for Extremely Premature Infants. *Survey of Anesthesiology*, 59(6), pp.272-273.
- Gopnik, A. (2011). *The Philosophical Baby: What Children's Minds Tell Us about Truth, Love & the Meaning of Life.* Random House, pp.110-134.
- Gupta, A. and Singhal, N. (2004). Positive perceptions in parents of children with disabilities. *Asia Pacific Disability Rehabilitation Journal*, 15(1), pp.30-34.
- Hare, R. (1981). *Moral Thinking: Its Levels, Method, and Point*. Oxford: Oxford University Press, pp.101-5.
- Harley, D., Fleming, A., Greer, S. and Mundt, P. (2018). *Disability and Vocational Rehabilitation in Rural Settings*: 24. *Disability and Vocational Rehabilitation in Rural Settings*. Online: Springer, Cham, pp.437-453.
- Hastings, R. and Taunt, H. (2002). Positive Perceptions in Families of Children With Developmental Disabilities. *American Journal on Mental Retardation*, 107(2), pp.116-127.
- Hedderly, T., Baird, G. and McConachie, H. (2003). Parental reaction to disability. *Current Paediatrics*, 13(1), pp.30-35.

- Harvard Medical School (2011). On the Brain. *The Harvard Mahoney Neuroscience Institute Letter*, 17(1), p.2.
- House of Commons (2007). *Scientific Developments Relating to the Abortion Act* 1967. Twelfth Report of Session 2006–07: Volume I. London: The Stationary Officer by Order of the House, p.13.
- Jensen-Moulton, S. (2012). Intellectual Disability in Carlisle Floyd's Of Mice and Men. *American Music*, 30(2), pp.129-156.
- Jurica, S., Colic, A., Gveric-Ahmetasevic, S., Loncarevic, D., Filipovic-Grcic, B., Stipanovic-Kastelic, J. and Resic, A. (2016). Skin of the very premature newborn physiology and care. *Paediatria Croatica*, 60(1), pp.21-26.
- Kant, I. (2007). *Anthropology from a pragmatic point of view* (1798). *In: Anthropology, History, and Education.* (*The Cambridge Edition of the Works of Immanuel Kant*). Cambridge: Cambridge University Press, pp.227-249. (Original work published 1798).
- Kittay, E. (2009). The Personal is Philosophical is Political: A philosopher and mother of a cognitively disabled person sends notes from the battlefield. *Metaphilosophy*, 40(3-4), pp.606-627.
- Kittay, E., Jennings, B. and Wasunna, A. (2005). Dependency, Difference and the Global Ethic of Longterm Care*. *Journal of Political Philosophy*, 13(4), pp.443-469.
- Kuratani, N. (2015). The cutting edge of neonatal anesthesia: the tide of history is changing. *Journal of Anesthesia*, 29(1), pp.1-3.
- Lantos, J. and Meadow, W. (2006). *Neonatal Bioethics: The Moral Challenges of Medical Innovation*. Baltimore: The Johns Hopkins University Press, pp.37-42.
- Locke, J. (1836). *An essay concerning human understanding*. 27th ed. Oxford: T. Tegg and Son. (Original work published 1690).
- Maj, M. (2012). Bereavement-related depression in the DSM-5 and ICD-11. *World Psychiatry*, 11(1), pp.1-2.

- Mangham, L., Petrou, S., Doyle, L., Draper, E. and Marlow, N. (2009). The Cost of Preterm Birth Throughout Childhood in England and Wales. *PEDIATRICS*, 123(2), pp.e312-e327.
- Meuti, V., Aceti, F., Giacchetti, N., Carluccio, G., Zaccagni, M., Marini, I., Giancola, O., Ciolli, P. and Biondi, M. (2015). Perinatal Depression and Patterns of Attachment: A Critical Risk Factor?. *Depression Research and Treatment*, 2015, pp.1-9.
- Ministry of Welfare (2017). Facts about Down syndrome and pre-natal screening in Iceland. [online]

 Government Offices of Iceland. Available at:

 https://www.government.is/news/article/2017/12/11/Facts-about-Down-syndrome-and-pre-natal-screening-in-Iceland/ [Accessed 16 Jul. 2018].
- Moon, C., Lagercrantz, H. and Kuhl, P. (2013). Language experiencedin uteroaffects vowel perception after birth: a two-country study. *Acta Paediatrica*, 102(2), pp.156-160.
- National Health Service (2015). *Colic*. [online] nhs.uk. Available at: https://www.nhs.uk/conditions/colic/ [Accessed 12 Aug. 2018].
- National Health Service (2016). *Baby teething symptoms*. [online] nhs.uk. Available at: https://www.nhs.uk/conditions/pregnancy-and-baby/teething-and-tooth-care/#teething-symptoms [Accessed 12 Aug. 2018].
- National Health Service (2018). *Getting to know your newborn*. [online] nhs.uk. Available at: https://www.nhs.uk/conditions/pregnancy-and-baby/your-baby-after-birth/ [Accessed 2 Aug. 2018].
- National Health Service (2017a). *Haemophilia*. [online] National Health Service. Available at: https://www.nhs.uk/conditions/haemophilia/ [Accessed 25 Jul. 2018].
- National Health Service (2017b). *Causes: Down's Syndrome*. [online] nhs.uk. Available at: https://www.nhs.uk/conditions/downs-syndrome/causes/ [Accessed 11 Aug. 2018].
- O'Leary, J. (2015). Subsequent pregnancy: healing to attach after perinatal loss. *BMC Pregnancy* and Childbirth, 15(S1).

- Office for National Statistics (2013). What matters most to personal well-being? Measuring National Well-being, What matters most to Personal Well-being? Online: The National Archives. Available at:

 http://webarchive.nationalarchives.gov.uk/20160107113217/http://www.ons.gov.uk/ons/rel/wellbeing/measuring-national-well-being/what-matters-most-to-personal-well-being-in-the-uk-/sty-personal-well-being.html [Accessed 9 Aug. 2018].
- Office for National Statistics (2018a). *A08: Labour market status of disabled people Office for National Statistics*. [online] Office for National Statistics. Available at:

 https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandem ployeetypes/datasets/labourmarketstatusofdisabledpeoplea08 [Accessed 10 Aug. 2018].
- Office for National Statistics (2018b). *Personal well-being in the UK: January to December* 2017. Online: Office for National Statistics, pp.11-12.
- Page, G. (2004). Are There Long-Term Consequences of Pain in Newborn or Very Young Infants?. *Journal of Perinatal Education*, 13(3), pp.10-17.
- Parliament (2017). *House of Commons Disability employment gap Work and Pensions Committee*. [online] Publications.parliament.uk. Available at: https://publications.parliament.uk/pa/cm201617/cmselect/cmworpen/56/5604.htm [Accessed 10 Aug. 2018].
- Pascalis, O., de Haan, M. and Nelson, C. (2002). Is Face Processing Species-Specific During the First Year of Life?. *Science*, 296(5571), pp.1321-1323.
- Pisoni, C., Garofoli, F., Tzialla, C., Orcesi, S., Spinillo, A., Politi, P., Balottin, U., Manzoni, P. and Stronati, M. (2014). Risk and protective factors in maternal–fetal attachment development. *Early Human Development*, 90, pp.S45-S46.
- Raz, J. (2006). Engaging Reason: On the Theory of Value and Action. Oxford University Press.
- Roberts Jr., J., Cronin, J. and Todres, I. (2001). *A practice of anesthesia for infants and children: Chapter 14*. 3rd ed. Philadelphia: Saunders.

- Royal College of Obstetricians and Gynaecologists (2010). *Pregnancy for Fetal Abnormality in England, Scotland and Wales*. London: Royal College of Obstetricians and Gynaecologists, p.viii.
- Sakota, T. (2012). Induced Abortion in Japan: From the viewpoint of the media. *Japan Medical Association Journal*, 55(3), pp.217-220.
- Santorum, M., Wright, D., Syngelaki, A., Karagioti, N. and Nicolaides, K. (2017). Accuracy of first-trimester combined test in screening for trisomies 21, 18 and 13. *Ultrasound in Obstetrics & Gynecology*, 49(6), pp.714-720.
- Schulze, P., Zhao, B. and Young, C. (2009). Beliefs About Infant Feeding in China and the United States: Implications for Breastfeeding Promotion. *Ecology of Food and Nutrition*, 48(5), pp.345-368.
- Shaw, A. (1973). Dilemmas of Informed Consent in Children. *New England Journal of Medicine*, 289(17), pp.885-890.
- Singer, P. (2017). Practical ethics. 3rd ed. Cambridge: Cambridge University Press.
- Singer, P. and Kuhse, H. (2002). *Unsanctifying human life*. 1st ed. Oxford: Blackwell.
- Smith, P., Namasivayam Ambalavanan,, N., Li, L., Cotten, C., Laughon, M., Walsh, M., Das, A., Bell, E., Carlo, W., Stoll, B., Shankaran, S., Laptook, A., Higgins, R. and Goldberg, R. (2012). Approach to Infants Born at 22 to 24 Weeks' Gestation: Relationship to Outcomes of More-Mature Infants. *PEDIATRICS*, 129(6), pp.X34-X34.
- Snyder, S. and Mitchell, D. (2006). *Cultural locations of disability*. 1st ed. Chicago: The University of Chicago Press, p.x.
- Statistics Iceland (2018). *Publication detail Population projections* 2017–2066. [online] Statistics Iceland. Available at: https://www.statice.is/publications/publication-detail?id=58823 [Accessed 11 Aug. 2018].
- Target Ovarian Cancer (2015). *Access to drugs* | *Target Ovarian Cancer*. [online]

 Targetovariancancer.org.uk. Available at: https://www.targetovariancancer.org.uk/our-campaigns/access-drugs/cancer-drugs-fund [Accessed 31 Jul. 2018].

- Terao, T. (2012). The Idea of the Maternal Protection Act and Its Application: From the standpoint of Japan Association of Obstetricians & Gynecologists. *Japan Medical Association Journal*, 55(3), pp.208-212.
- The Soap Co. (2018). *Our People*. [online] The Soap Co. Available at: https://thesoapco.org/pages/our-people [Accessed 19 Jul. 2018].

Tooley, M. (1972). Abortion and Infanticide. Philosophy and Public Affairs, 2(1), pp.37-65.

Tooley, M. (1983). Abortion and infanticide. Oxford: Clarendon Press.

United Nations (2002). Abortion Policies: A Global Review - Iceland. [online] United Nations
Department of Economic and Social Affairs. Available at:
http://www.un.org/esa/population/publications/abortion/profiles.htm [Accessed 7 Aug. 2018].

University of Rochester Medical Center (2018). *Birth Injuries-Health Encyclopedia*. [online]

University of Rochester Medical Center. Available at:

https://www.urmc.rochester.edu/encyclopedia/content.aspx?contenttypeid=90&contentid=p02687 [Accessed 2 Aug. 2018].

Watson, G. (1987). Free Agency. Mind, 96(382).

World Health Organisation (2018). *Preterm birth*. [online] World Health Organization. Available at: http://www.who.int/news-room/fact-sheets/detail/preterm-birth [Accessed 21 Jun. 2018].