

CONTINGENT HORIZONS

The York University Student Journal of Anthropology

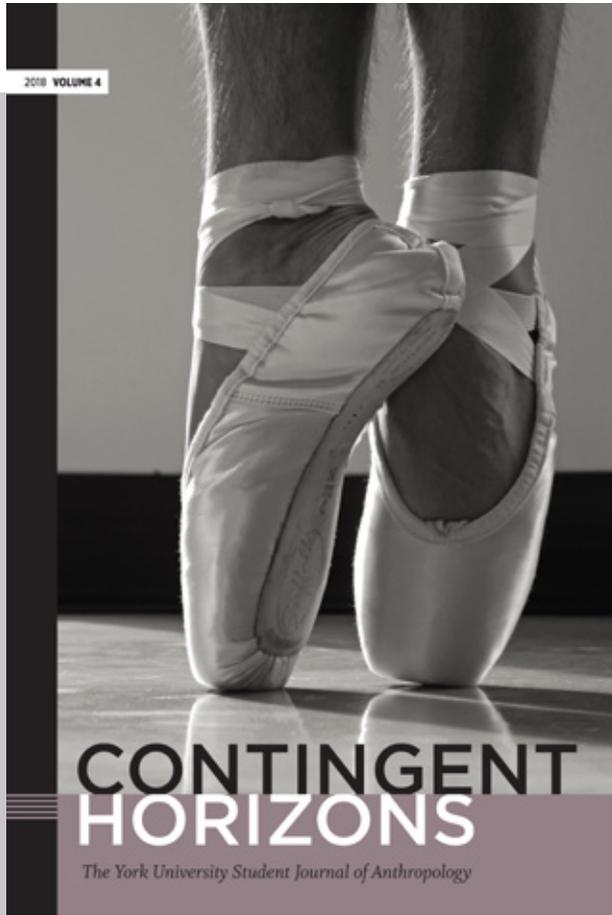
VOLUME 4, NUMBER 1 (2018)

PUBLIC ANTHROPOLOGY

The Biopolitics of Prenatal Diagnosis: How the Definition of “Health” Shapes the Use and Development of Prenatal Testing

Leslie Marie Vesely

MA Student, Department of Anthropology | York University, Toronto, Canada



Contingent Horizons: The York University Student Journal of Anthropology. 2018. 4(1):47-59.

First published online September 4, 2018.

Contingent Horizons is available online at www.contingenthorizons.com.

Contingent Horizons is an annual open-access, peer-reviewed student journal published by the department of anthropology at York University, Toronto, Canada. The journal provides a platform for graduate and undergraduate students of anthropology to publish their outstanding scholarly work in a peer-reviewed academic forum. Contingent Horizons is run by a student editorial collective and is guided by an ethos of social justice, which informs its functioning, structure, and policies. Contingent Horizons' website provides open-access to the journal's published articles.

ISSN 2292-7514 (Print) ISSN 2292-6739 (Online)

EDITORIAL COLLECTIVE Meredith Evans, Nadine Ryan, Vishwaveda Joshi.

COVER PHOTO Nadine Ryan

The Biopolitics of Prenatal Diagnosis

How the Definition of “Health” Shapes the Use and Development of Prenatal Testing

LESLIE MARIE VESELY

MA STUDENT, DEPARTMENT OF ANTHROPOLOGY
YORK UNIVERSITY, TORONTO, CANADA

This article critically examines the definition of “health” in Western epistemology and its link to the use and development of prenatal testing. Biopolitics and biocapital are explored when discussing the malleability of the definition of “health.” This article argues that the equation of “health” with able and productive bodies is naturalized in society and seen as stagnant because of a scientific claim to detached objectivity. This article suggests that this definition of “health” aids in creating, reproducing and supporting a capitalist, neoliberal governmental regime in Canada by focusing on the productivity of bodies, which fosters some lives and hinders others. This article considers the effect this definition of “health” has on the public and questions why prenatal diagnosis continues to gain so much popularity. Importantly, it questions who this technology benefits.

KEY WORDS Capitalism, disability, health, knowledge systems, prenatal testing, state, technology

Advancements in the medical field allow for new technologies that challenge hegemonic kinship beliefs and ideals surrounding “health.” Prenatal diagnosis is a new technology that has recently been gaining momentum around the world (Saxton 2000). This procedure allows the diagnosis of certain physical and genetic disabilities in developing fetuses. Abortion is legal across Canada, which means that pregnant people who discover that the fetus they are carrying may have a diagnosable disability have the choice to terminate the pregnancy (Canada 2015). This has created much controversy around this technology because many activist groups believe that this is a move towards eugenics and is a blatant attack against people with disabilities (Saxton 2006). Disability is commonly equated with illness and fetuses who show signs of genetic and physical differences are often framed as being unhealthy (Saxton 2000). Hence, prenatal testing raises the question of what constitutes a “healthy” fetus and potential human citizen. In this article I use a biopolitical framework to explore how dominant neoliberal and capitalist ideologies influence understandings of “health” and the use of prenatal diagnosis. I argue that prenatal testing is a technology that aids in regulating and policing human bodies to ensure the proliferation of productive citizens who can effectively contribute to the economy and become self-sustaining.

Prenatal Diagnostic Procedures

There are many different kinds of prenatal diagnostic techniques that can be used to detect genetic differences throughout pregnancy. Generally, these procedures can be divided into two categories: invasive and non-invasive. Invasive techniques involve coming into contact with the fetuses' or embryos' immediate surroundings, such as the amniotic sac inside of the uterus, usually with the guidance of an ultrasound (Evans and Wapner 2005). The ultrasound, a non-invasive tool, is also commonly used alone to detect any physical deformities. Two main invasive techniques are amniocentesis and chorionic villus sampling (cvs) (Evans and Wapner 2005). Amniocentesis involves inserting a needle into a pregnant woman's lower abdomen, taking amniotic fluid from the uterus, and culturing the fetus' or embryos' cells to determine if there are any genetic abnormalities (The University of Utah Eccles Health Sciences Library 2017). cvs involves inserting a catheter through the vaginal opening to collect cells from the placenta (The University of Utah Eccles Health Sciences Library 2017). As with amniocentesis, these cells are cultured in a laboratory to detect any genetic abnormalities. As these two procedures involve coming into close contact with the fetus, there are some associated risks such as fetal death and fetal limb defects (Evans and Wapner 2005). However, risks vary depending on when the procedure is carried out in the pregnancy.

In 1997 researchers found that fetal *dna* can be obtained through the blood plasma of pregnant women (De Jong et al. 2010). This discovery was used to develop non-invasive prenatal diagnosis (*nipd*), which has been on the rise in recent years. *NIPD* is found to be more accurate, safer, easier to administer, and can be performed earlier in the pregnancy than invasive procedures (De Jong et al. 2010). Instead of using needles or catheters to collect *DNA* from cells directly from the fetus or embryo, doctors take blood from the woman's arm and isolate fetal *DNA* (De Jong et al. 2010). This technique is specifically helpful in detecting trisomy 21 (Down syndrome), trisomy 13 (Patau syndrome), and trisomy 18 (Edwards syndrome), but is being further developed to detect a wider range of genetic disorders (De Jong et al. 2010).

Defining "Health"

In the 21st century, "health" is commonly equated with "normal" and a criterion of "health" or "normalcy" is being able bodied. However, this deep connection between health and normalcy did not always exist (Foucault 1994). During the 17th to 18th centuries, biomedicine was rapidly gaining popularity and authority through its adherence to rationality, empiricism, and positivism (Samson 1999). The focus on knowledge generated through observation, lived experiences, and privileging of tangibility was sparked during the Enlightenment period (Samson 1999). Descartes, a predominant philosopher in the 17th century, was a major figure during this period and theorized a separation between the mind and body (Samson 1999). This division opened the door for biomedicine and its focus on the physical body.

Medical practitioners' began to "map" out the body, trying to find commonalities and patterns between various bodies (Samson 1999). Through their focus on the tangible body, practitioners began to claim that the knowledge they were generating was universal and

was applicable to all human beings (Foucault 1994). Instead of viewing their understandings of the body as a creation of various collective forces, they viewed their knowledge as objective. That is, practitioners argued that they were merely uncovering universal facts of life and viewed themselves and their context as detached from the knowledge they uncovered (Foucault 1994). This claim to detached objectivity gained medical practitioners authority in the knowledge production and practices concerned with the physical body (Foucault 1994). Through this claim to universality and detached objectivity, ideas of a “healthy” human began to surface and standards of physical beings began to be expressed (Foucault 1994). Although 18th century medicine approached health as individual, 19th century medicine began to view health in relation to norms and standards (Foucault 1994). As Michel Foucault (1994) wrote, life became defined in terms of “the medical bipolarity of the normal and the pathological” (35). This dichotomy of normal and pathological, along with the connection between “health” and “normalcy” is still prevalent in North America.

There are many traits that are perceived to be “normal” and make up a “healthy” body. These characteristics vary depending on social, geographical, and temporal context (Ginsberg and Rapp 2013). The criteria for a “healthy,” “normal” body also varies depending on normative stages of development. A child who is unable to walk is viewed as more disabled than an elderly person who is unable to walk. Thus, who gets labeled as “disabled” is relational and contextual. People who are perceived as not being *able* to “normally” interact with their social and physical surroundings are seen as abnormal and handicapped (Ginsberg and Rapp 2013). The term “dis-abled” can alternatively be interpreted as “un-able” to participate fully in society (Ginsburg and Rapp 2013). Hence, “health” and “normalcy” are further equated with being “able.”

Medical practitioners obtain authority over the physical body through their claim to detached objectivity. This common claim has been challenged by feminist scholars, one being Donna Haraway. Haraway (1988) argued that there are no universal truths and that all knowledges are situated in time and space. She argued that to claim detached objectivity is to claim to “seeing everything from nowhere,” a phenomenon Haraway calls “the God Trick” (581). Instead, she asserted that all knowledge is situated and is formed under specific conditions that allow for those findings, hence there are multiple truths (Haraway 1988). The “God Trick” allows for knowledge about what constitute “health” and “normalcy” to be considered universal truths, implying that “health” and “normalcy” itself are stagnant terms with strict definitions and criteria. However, informed by Haraway’s situated knowledges, these terms can instead be understood as fluid. Andriana Petryna’s (2002) work on Chernobyl highlights the fluidity in such concepts as she explores the constantly changing threshold of disability and health due to environmental, political and economic changes. Hence, the criteria, boundaries, and understandings of “health” and “normalcy” are constantly shifting as informed by changing contexts.

Likewise, understandings of disability and beliefs attached to particular “abnormal” traits are temporally, socially and environmentally situated; hence, there is no one definition of disability and in some communities, the category of disability does not exist (Ginsburg and Rapp 2013). Throughout this article I use the term “differently abled” to challenge the perceived stagnation and timelessness of this term. The term “differently abled” recognizes the multitude of different bodies that exist, while acknowledging that all

forms of bodies are able to interact with their social and physical contexts in different ways. This phrase challenges the notion of one “normal,” “healthy” body that can positively interact with their surroundings, and challenges the idea that there is one “normal,” “healthy” way of interacting within a particular context. To fully unpack the connection between “health,” “normalcy,” and ableism, it is useful to attend to the systems and ideologies in place that create a particular social and physical environment that favors particular bodies over others. A useful entry point in exploring these systems is through a close examination of politics and governance.

Governing the Body

Foucault (2008) claimed that definitions of “health” and “normalcy” do not exist independent of the state or ruling authority. The definitions of these terms crafted and instilled by the state are not universal truths; for example, Petryna (2002) demonstrates how the state shapes the definition and requirements of health in order to support a particular system of governance. In Petryna’s case study, standards of disability increased in the Soviet Union after radiation flooded Chernobyl and surrounding areas. This was done to justify sending people into the disaster zone to clean up the nuclear waste, which was extremely risky. After the Soviet Union dissolved and the Ukrainian government formed, standards of health increased and began to recognize more victims of Chernobyl as disabled. While it is often believed that “health” is unchangeable and holds some ultimate truth, Petryna’s work demonstrates how the idea of what is “healthy” established by the state speaks to their system of governance and not to a universal truth or universal definition of “healthy” or “normalcy.”

Biomedicine influences politics as it helps shape understandings of health and normalcy. Science is romanticized as having the ability to overcome human flaws, thus technologies such as prenatal diagnosis can be glorified as having the ability to help ensure the production of “perfect” children (Ginsburg and Rapp 1991). Likewise, the biology of all species, including humans, is deeply intertwined with the state and is sculpted by politics. The authority held by the state aids in creating and maintaining uneven power relations between governments and citizens, where governments hold a lot of power to shape and uphold what “health” and “normal” means to the public. This redefines how the public and health officials view “health,” which influences how technology, infrastructure and societal ideologies are shaped to cater to and foster particular kinds of bodies—and lives—over others.

The intricate links between politics and “health,” as well as the flexibility of the meanings of “health,” can be analyzed through the theoretical lens of biopolitics. Biopolitics, according to Foucault (1984), is the governing of bodies done by the state and through self-regulation, whereby some lives are fostered and others hindered. Understanding power in a Foucauldian sense as an uneven network of relations sheds light on the role of citizens’ participation in governance, specifically through policing one another (Foucault 1978). Ideas of what is considered to be a “good,” “healthy” citizen becomes embodied by people. This embodiment allows citizens to independently strive for these goals of “health” and “normalcy,” which further normalizes these practices and beliefs (Foucault 1984). Prenatal

diagnosis is a technology that polices people's reproduction as it is used to ensure the fetus is "healthy" and "normal" to the standards of the society. To this end, prenatal diagnosis can be understood as a tool of biopolitics that is shaped by particular ideas of what it means to be genetically and physically normal and healthy. This biopolitical tool embodies citizens' desires for their own normal and healthy bodies and offspring. Prenatal testing allows the public, doctors, and the state to police and regulate bodies at the gestational stages to ensure the birth of a "healthy," "normal" child (Ginsburg and Rapp 1991). The detection of disability in a fetus often results in abortion (Ginsburg and Rapp 1991; Rapp and Ginsburg 2001), which raises ethical questions of whose lives are fostered and whose lives are disallowed.

The ethical dilemma of the value of lives can be explored through understanding the body as commodified and reduced to a mere resource to be used to support a particular regime. In this light, particular bodies are viewed as worth fostering because of the value and potential they have in supporting a particular form of governance (Rose 2001). The remnants of the mind/body dichotomy from the Enlightenment period helps foster this commodification as people are reduced to their body composition and physical capabilities (Samson 1999). People are viewed as bodies that are to be manipulated, colonized, and dehumanized both socially and emotionally (Samson 1999). The detachment of the body aids in reducing people to the commodified value of their body, a value that is determined by how their body can follow, uphold, and reproduce a particular form of governance. Bodies are viewed as resources, with their maintenance and activity policed by the state, fellow citizens, and selves through the internalization of these ideologies (Foucault 1984).

Prenatal Health in the Global Arena

Prenatal diagnosis is globally widespread, and the understanding and uses of this technology changes based on context. The fluidity and situatedness of "health" takes part in shaping how this biotechnology is understood and used. In the global arena, a large contributing actor that greatly influences the knowledge and practices of "health" and prenatal diagnosis is the United Nations (UN). The UN is an international organization that was founded after World War Two and has multiple interconnected specialized sectors that focus on different issues, including the World Bank and the World Health Organization (WHO) (United Nations 2017). Currently there are over 190 countries that are part of this organization. While one of the UN's main purposes, as outlined in their charter, is to maintain global peace and justice, the UN and their specialized sectors have a very particular idea of "development" and the paths to achieve it. For example, the World Bank lends money to developing countries and places particular restrictions to ensure these countries become economically prosperous by being active in the global economy (Brown et al. 2006). These restrictions take on a neoliberal framework, advocating for free markets and less government involvement (Brown et al. 2006). The World Bank became interested in global health and a larger part of the WHO due to the assumption that increased health assistance will result in increased economic development and less poverty (Brown et al. 2006). This perceived tie between health and the economy influences definitions and standard of health, and also shapes technologies that arise.

In an attempt to industrialize and “modernize” poorer countries such as India, China, and Vietnam, the United Nations created the Human Development Index (HDI) (Gammeltoft 2007). The HDI outlines criteria to assess the overall human development of a nation, and considers the average years of education, life expectancy, and standard of living as measured by the gross national income per capita (Human Development Reports 2016). This set of criteria places significant importance on citizens’ health and ability to participate in the workforce and contribute to a capitalist, industrialist society. Striving for “healthy” children who can be self-sufficient and stimulate the economy has led many countries to adopt techniques, such as prenatal testing, to detect fetal abnormalities. In Vietnam, the government is aiming to decrease the amount of children born with disabilities, despite their history of chemical warfare which affected the population’s reproductive health and ability to have “healthy” children (Gammeltoft 2007). Hence, there is a major push for prenatal screening. In China, doctors are told to encourage abortion to mothers who are found to be carrying an “abnormal” fetus (Sui and Sleeboom-Faulkner 2010). Reflective of the ideas that the HDI encourages, the Chinese Population and Family Planning Law states that family planning is based off the goal of decreasing the quantity of children while increasing the “quality” (Sui and Sleeboom-Faulkner 2010). “Quality” in this case alludes to the citizen’s ability to effectively participate in the economic and social regime of the nation.

The HDI and focus on the economy suggests that the UN is aiming to increase the reproduction of productive bodies; productive in the sense that citizens bodies will be able to actively engage in a neoliberal, capitalist society as set out by the UN. Through the UN’s stress on “healthy,” independent working bodies, the UN and participating countries aim to become “modern” and “developed.” These parties are actively commodifying bodies as they are encouraging the proliferation of a particular body that is deemed to be best suited and productive under a capitalist regime. By encouraging the birth of children who possess a “healthy” body, there will be more “resources” to ensure the growth and support of the global economy.

Prenatal Diagnosis

Health as defined in terms of the commodification of humans gives rise to particular biotechnologies, including prenatal diagnosis. Prenatal diagnosis is a biotechnology that detects abnormalities during the gestational period. These traits are deemed as abnormalities based on the degree it impacts the fetus’ future productivity. This technology helps to subtly control reproduction to ensure the “best” population is being made according to the standards of the state.

While each country and group of people impacted by the UN interpret prenatal diagnosis differently based on their different contexts, citizens’ relation to different bodies is being heavily influenced by a global political system that values neoliberalism and the accumulation of capital. A person deemed able-bodied and healthy from this perspective is seen as more valuable because of their ability to produce capital. In this case, disability is when one is unable to participate in the formal economy. In this light, it can be argued that humans are being treated as biocapital. Stephan Helmreich (2007) describes biocapital with an altered equation that was inspired by Marx: $B-C-B'$, where B is the

biomaterial, *c* is the commodification of the biomaterial, and *b'* is the biotechnology that arises (293–294). He argues that often times the biomaterial is instantly equated with its possibility to produce biotechnology, so that the commodification process of this material is ignored. His altered equation can also be understood in terms of the human capacity to work. Humans are biomaterial (full, living organisms) whose existence is commodified through particular expectations of “health” that allow us to be shaped into citizens of the state who have the capacity to produce capital. Citizens go to school, follow laws, value certain skills and characteristics, and participate in the “normal” routine of life as dictated by the government, so that they can one day enter the workforce and generate capital for years to come. However, the only way to work to full capacity and commodify bodies and labour is if the person meets certain criteria, criteria that is grouped together and labelled “health,” which is then normalized through scientists claim to detached objectivity.

The commodification of bodies and the idea that being “normal” and “healthy” is to be productive is echoed in the sentiments of the public as well. In Nancy Press and colleagues (1998) study of expectant North American mothers who underwent prenatal testing, they found that participants most admired differently abled people for their persistence to be seen as “normal” and not letting their “disability” get in the way of doing “normal” things. Many admired when they saw people who they deem to be disabled as “trying to lead a normal life” (53). The attempt of normalcy gains respect for those deemed “disabled.” “Normal” activities in North America include being independent, working, going to school, and starting a family—all of which reproduce and maintain a neoliberal, capitalist regime. Differently abled people gain public respect when they participate in “normal” lifestyles despite their “disabilities.”

Prenatal Diagnosis in Canada

Canada is a part of the UN and has a political system that supports a neoliberal capitalist society (Albo 2002). This does not mean that Canada has the same understandings and uses of prenatal diagnosis as China or Vietnam. Localizing the effects of capitalism and neoliberalism on prenatal diagnosis in a region, such as Canada sheds light on the multiple actors that are implicated by this dynamic, which includes employers, women undergoing prenatal diagnosis, differently abled people, and the state. As with the general ideology held by the UN, in Canada having a physical, mental, or genetic trait which limits one’s capacity to work and participate in the country’s economy is seen as “unhealthy,” not “normal,” and thus as a disability. In Canada’s Executive Summary of the Key Health Inequalities in Canada, disability was listed as one of the key indicators of one’s “health status” (Canada 2018a). In this definition, a key indicator of health is the absence of a disability. Canada’s Determinants of Health report also noted “genetic endowment” as a “main determinant of health” (Canada 2018b). This understanding of health implies that genetic and physical deviations from particular standards are unhealthy and abnormal. These differences intrude with interacting with society in normative ways. Normative social interactions in Canada typically include getting a degree, finding a job, getting married, and having children—which are all believed to aid the economy. Having a genetic or physical trait that prevents or limits these goals are seen as abnormal traits.

Advances in technologies, such as prenatal diagnosis, help to ensure that people are producing “healthy” children. While in Canada it is unethical for doctors or the government to try to persuade people into choosing selective abortion, there are many indirect influences on this decision. Statistics Canada (2015) reported that in 2010, the median total income of differently abled people was \$10 000 less than their normative abled counterparts. Differently abled people are underemployed, and are usually forced to take part-time positions because no one offers them full-time work (CBC 2013). Only 47% of differently abled adults between the ages of 15 to 64 are employed (Statistics Canada 2015). It can be argued that high unemployment among differently abled adults is a result of negative biases that are held against differently abled people, which impact their level of inclusion (CBC 2013). It is reported that 43% of working differently abled people see themselves at a disadvantage in the workforce and 44% believe their employers consider them disadvantaged as well (Statistics Canada 2015).

The fear that living with a disability means suffering is a major concern that people have about having a differently abled child (Press et al. 1998; Rapp and Ginsburg 2001). However, as ableism and disability studies scholar Gregor Wolbring of the University of Calgary pointed out in an interview with CBC:

Suffering is a very subjective term, it's an emotive term to get acceptance, but that also takes people away from why people are really suffering. That's a long debate within the disability field. Do I suffer because I have no legs, or do I suffer because you have legs and build everything accordingly? (CBC 2016)

Wolbring highlights that what is considered as a disability is highly dependent on physical and social surroundings. If one cannot effectively navigate a particular physical and social terrain, they are labelled as disabled and suffering due to their “limitations” (Ginsburg and Rapp 2013). These limitations are based on particular ideas of normality and of certain ideas of how people should interact with their surroundings. Deviation from this expected human-surrounding interaction results in labels of being unhealthy. However, ideas of “health” are shaped to accommodate the goals, desires, and context of that political and economic climate. The current system and underlying hegemonic cultural ideologies are shaped by and benefit people who meet a specific definition of “health.” While parents and differently abled people do get some support in Canada, such as disability benefits, and special grants and loans, it is hard to ignore the more entrenched societal hurdles that are presented to people considered disabled. These hurdles influence the uptake of prenatal testing and subsequent decisions of selective abortion based on disability, ultimately catering to a particular kind of body and life over another (Ginsburg and Rapp 2013). Prenatal testing acts as a tool of biopolitical governance that works to detect particular types of bodies based on their perceived genetic or physical “abnormalities.” The social hurdles that exist for differently abled bodies work to sway people into producing “normal” and “healthy” citizens who can positively and effectively engage in the country's social and physical surroundings. The systems, ideologies, and technologies in place value particular bodies and lives over others (Rose 2001). Hence, the idea of having “free choice” over whether or not to have an abortion based on disability is an illusion because of the systems and ideologies in place that subtly discourage particular kinds of bodies.

Press and colleagues (1998) examine contradicting views on disability. In their study of expectant North American mothers who underwent prenatal testing, they found that most participants talked positively of people with disabilities, using words such as “loving,” and “...so easy to love” (52–53). However, when asked how they would react if their child had a disability, the tone of the parents changed negatively. Many said that while they believe they can love their child the same as a “normal” child, they acknowledged that it would be very hard to care for them and that it would take a “special” kind of parent to be able to raise them. Caretakers are active participants in society, but also aid differently abled people in participating in a society that would otherwise exclude them (Ginsburg and Rapp 2013). Parents feared social embarrassment, stigma against them and their child who has a disability, and feared that their child would suffer (Press et al. 1998). Such uncertainty and contradicting beliefs surrounding disability (your own child versus another child) shows the general ambivalence surrounding this topic.

The perspective of people who identify as disabled must also be considered when exploring issues of disability and prenatal diagnosis. It is not surprising that many people who identify as disabled or who have differently abled children are outraged because of the termination of pregnancies based on disabilities detected through prenatal diagnosis. In all Canadian provinces, except Nunavut, the observed number of children born with Down's Syndrome is significantly lower than the expected number of children born with this condition (Government of Canada 2017). A major contributor to this appears to be the increased use of prenatal diagnosis in detecting Down's Syndrome and subsequent abortions (Government of Canada 2017). This gap in expected and observed number of children born with Down's Syndrome is expected to increase with more accurate and safe prenatal tests emerging (Boseley, 2016). Many disability activists are calling this genetic discrimination, which is when someone is treated differently because of their “apparent or perceived genetic variation from the ‘normal’ human genotype” (Bilings et al. 1992). This extends to prenatal diagnoses because this test looks at one's genome to detect genetic abnormalities, such as Down's Syndrome. Disability activists are calling this a form of eugenics and genocide. Many North Americans view prenatal diagnosis as a “good” technology that is “common sense” to use (Saxton 2006). However, this belief is based on the assumption that differently abled people lead a less enjoyable life than normatively abled people (Saxton 2000). It also assumes that raising differently abled children is a burden to the parents and larger social network. Deborah Kaplan, a disability activist notes:

If persons with disabilities are perceived as individuals who encounter insurmountable difficulties in life and who place a burden on society, prenatal screening may be regarded as a logical response. However, if persons with disabilities are regarded as a definable social group who have faced great oppression and stigmatization, then prenatal screening may be regarded as yet another form of social abuse. (Saxton 2000, 148)

Understanding differently abled people as a unified social group that is disadvantaged due to the social and physical structures in place that uphold and reproduce normative ideas of “health” and a particular form of governance illuminates the power imbalances in place between normatively able people and those deemed “disabled.” Prenatal diagnostic

techniques cater to the reproduction of a particular kind of body, while discouraging other kinds of bodies. When Marsha Saxton (2006) organized a conference in Vancouver on the topic of disability and prenatal diagnosis, her friend who is a dedicated disability activist said, “I think this conference is important, but I have to tell you, I have trouble being in the same room with professionals who are trying to eliminate *my people*” (added emphasis). This shows a community is created through the identity of having a disability, and displays a sense of solidarity. The advancements in disability rights were fought for and put in place to not only benefit differently abled people who were alive at that time, but also for future generations (Saxton 2006; Rapp and Ginsburg 2001). However, it is important to note that not all people with disabilities feel attacked by prenatal diagnosis, and some agree with it based on their own personal experiences of having a disability or for other reasons (Saxton 2006).

The Canadian government’s *Social Determinant of Health and Health Inequalities* report acknowledges that some Canadians have “more opportunities to lead a healthy life” than others (Government of Canada 2018b). It is acknowledged that health inequalities are due to a myriad of factors including education, employment status, income, and genetics (Government of Canada 2018a). Through the acknowledgment of the social aspects of health inequalities, it is revealed that a higher socioeconomic status results in “more opportunities to lead a healthy life” (Government of Canada 2018b). This sheds light onto who is privileged with access to the title of “good health,” which are citizens who can effectively participate and stimulate the economy through employment and investing in higher education. People who are employed or have a higher education are more likely to be considered healthy and have more “opportunities” to establish and maintain their “health status.” Bodies that are able to be productive by Canadian societal standards are rewarded with access to resources that help uphold their position as “healthy.” People who cannot maintain their productivity or adhere to normative ideals of social interaction are disadvantaged economically and socially, often being discriminated against. By having an environment and a political system in place that does not fully support differently abled people, people are indirectly being discouraged from having differently abled children (Rapp and Ginsburg 2001). This benefits the overall economy because more “healthy” children will be born who can participate effectively in Canada’s capitalist society. Through Canada’s acknowledgement of health inequalities, we must consider the foundations of this inequality, who this situation benefits, who this situation negatively impacts, and *how*. By exploring Canada’s position on health disparities and acknowledgement of the role of social inequalities, the normative ideologies and dominant social systems in place can be examined and used to understand how prenatal testing implicitly works to foster some lives while disallowing others.

Conclusion

In the end, with the rise of new reproductive technologies, such as prenatal diagnosis, questions of what constitutes “health” are raised. “Health” is commonly equated with “normal,” and a criterion of these labels is to not be “disabled.” Dis-abled can be understood as being un-able to actively be productive in a particular form of governance. Biopolitics is a helpful theoretical framework in exploring what “health” means and who decides its

boundaries. Biopolitics are comprised of both state and citizen regulation of bodies that reinforces and maintains dominant systems and ways of living. “Health” is a flexible term that changes based on context but is portrayed as a universal truth by scientists and health officials who claim a detached objectivity. With the naturalization of a specific definition of “health,” laws, regulations and technologies are developed and maintained to uphold particular ideologies such as neoliberalism and capitalism. An exploration of the UN shows the intimate link between capitalism, neoliberalism, and understandings of the body and prenatal diagnosis. This link and the understanding of health and prenatal diagnosis are situated and fluid, as can be seen by the various approaches taken by various countries connected to the UN. Despite differences between prenatal testing in different countries, a commonality is that people are being treated as biocapital and being commodified through various methods. If someone is not able to fully participate in the capitalist society and are not able to be effectively commodified then they are deemed “unhealthy.” In Canada, while the government may overtly say that access to prenatal diagnosis is not meant to encourage a “new eugenics” of differently abled people, systems and ideologies in place are indirectly encouraging the use of prenatal diagnosis to reduce the amount of “unhealthy” people born who are “un-able” to fully participate in society. New technologies arise for a reason and are created to serve a purpose. Prenatal diagnosis was created and is being improved for the purpose of detecting particular kinds of illnesses in fetuses. Hence, we need to be critical of why so much importance is placed on the development of this technology, who this technology benefits, and whose lives it compromises.

References

- Albo, Gregory. 2002. “Neoliberalism, the State, and the Left: A Canadian Perspective.” *Monthly Review* 54 (1): 46–55.
- Billings, Paul R., Mel A. Kohn, Margaret de Cuevas, Jonathan Beckwith, Joseph S. Alper, and Marvin R. Natowicz. 1992. “Discrimination as a Consequence of Genetic Testing.” *American Journal of Human Genetics* 50: 476–482.
- Boseley, Sarah. 2016. “NHS to Offer Safer Down’s Syndrome Test to Pregnant Women.” *The Guardian* website. Accessed October 1, 2017. <https://www.theguardian.com/society/2016/oct/29/safer-downs-syndrome-test-nhs-pregnant-women-nipt>.
- Brown, Theodore M., Marcos Cueto, and Elizabeth Fee. 2006. “The World Health Organization and the Transition from ‘International’ to ‘Global’ Public Health.” *American Journal of Public Health* 96 (1): 62–72.
- Government of Canada. 2015. *Canada Health Act: Annual Report 2014–2015*. Ottawa: Health Canada.
- . 2017. *Down Syndrome Surveillance in Canada 2005–2013*. Ottawa: Public Health Agency of Canada.
- . 2018a. *Key Health Inequalities In Canada: A National Portrait – Executive Summary*. Ottawa: Public Health Agency of Canada.
- . 2018b. “Social Determinants of Health and Health Inequalities.” *Public Health Agency of Canada* website. Accessed July 1, 2018. <https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html>.

- CBC News. 2016. "If Abortion Based on Gender is Wrong so is Abortion Based on Disability: U of C Prof." *CBC News* website. Accessed September 1, 2017. <http://www.cbc.ca/radio/the180/abortions-for-some-but-not-all-left-footed-braking-and-regret-over-raising-a-secular-child-1.3536556/if-abortion-based-on-gender-is-wrong-so-is-abortion-based-on-disability-u-of-c-prof-1.3536619>.
- CBC News. 2013. "12 Facts and Figures about having a Disability in Canada." *CBC News* website. Accessed September 1, 2017. <http://www.cbc.ca/strombo/news/by-the-numbers-international-day-of-persons-with-disabilities>.
- De Jong, Anita, Wybo J. Dondorp, Christine E. M. de Die-Smulders, Suzanna Gerarda Maria Frints, and Guido M.W.R. de Wert. 2010. "Non-Invasive Prenatal Testing: Ethical Issues Explored." *European Journal of Human Genetics* 18: 272–277.
- Evans, Mark I., and Ronald J. Wapner. 2005. "Invasive Prenatal Diagnostic Procedures 2005." *Seminars in Perinatology* 29 (4): 215–218.
- Foucault, Michel. 1984. "Docile Bodies," "The Means of Correct Training," and "The Right of Death and Power Over Life." In *The Foucault Reader*, edited Paul Rabinow, 179–205, 258–272. New York: Pantheon.
- . 2008. *The Birth of Biopolitics: Lectures at the College De France, 1978–79*, edited by Michel Senellart and translated by Graham Burchell. Basingstoke, UK: Palgrave Macmillan.
- . 1994. *The Birth of the Clinic: An Archaeology of Medical Perception*. New York: Vintage Books.
- . 1978. *The History of Sexuality Vol1: An Introduction*. New York: Pantheon.
- Gammeltoft, Tine M. 2007. "Prenatal Diagnosis in Postwar Vietnam: Power, Subjectivity, and Citizenship." *American Anthropologist* 109 (1):153–163.
- Ginsburg, Faye, and Rayna Rapp. 2013. "Disability Worlds." *Annual Review of Anthropology* 42: 53–68.
- . 1991. "The Politics of Reproduction." *Annual Review of Anthropology* 20 (1): 311–343.
- Haraway, Donna J. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspectives." *Feminist Studies* 14 (3): 575–99.
- Helmreich, Stefan. 2007. "Blue-Green Capital, Biotechnology Circulation and an Oceanic Imaginary: A Critique of Biopolitical Economy." *Biosocieties* 2: 287–302.
- Masco, Joseph. 2004. "Mutant Ecologies: Radioactive Life in Post-Cold War New Mexico." *Cultural Anthropology* 19 (4): 517–550.
- Petryna, Adriana. 2002. *Life Exposed: Biological Citizens After Chernobyl*. Princeton: Princeton University Press.
- Press, Nancy, Carole H. Browner, Tran Diem, Christine Morton, and Barbara Le Master. 1998. "Provisional Normalcy and 'Perfect Babies': Pregnant Women's Attitudes Toward Disability in the Context of Prenatal Testing." In *Reproducing Reproduction: Kinship, Power, and technological Innovation* edited by Sarah Franklin and Helena Ragoné, 46–65. Philadelphia: University of Pennsylvania Press.
- Rapp, Rayna, and Faye Ginsburg. 2001. "Enabling Disability: Rewriting Kinship, Reimagining Citizenship." *Public Culture* 13 (3): 533–556.
- Rose, Nikolas. 2001. "The Politics of Life Itself." *Theory, Culture, and Society* 18 (6): 1–30.
- Samson, Colin. 1999. "Biomedicine and the Body." In *Health Studies: A Critical and Cross-Cultural Reader*, edited by Colin Samson, 3–21. Oxford: Blackwell.

- Saxton, Marsha. 2006. "Disability Rights and Selective Abortion." In *The Disability Studies Reader 2nd edition*, edited by Lennard J. Davis, 105–116. New York: Routledge.
- . 2000. "Why Members of the Disability Community Oppose Prenatal Diagnosis and Selective Abortion." In *Prenatal Testing and Disability Rights*, edited by Erik Parens and Adrienne Ash, 147–164. Washington: Georgetown University Press.
- Statistics Canada. 2015. *A Profile of Persons with Disabilities Among Canadian Aged 15 Years or Older, 2012*. Ottawa: Statistics Canada.
- Sui, Suli, and Margaret Sleeboom-Faulkner. 2010. "Choosing Offspring: Prenatal Genetic Testing for Thalassaemia and the Production of a 'Saviour Sibling' in China." *Culture, Health & Sexuality* 12 (2): 167–175.
- United Nations. 2017. "Funds, Programmes, Specialized Agencies and Others." *United Nations* website. Accessed January 1, 2018. <http://www.un.org/en/sections/about-un/funds-programmes-specialized-agencies-and-others/index.html>.
- University of Utah Eccles Health Sciences Library. 2017. "Prenatal Diagnosis." *Webpath* internet pathology laboratory for medical education. Accessed September 1, 2017. <https://library.med.utah.edu/WebPath/TUTORIAL/PRENATAL/PRENATAL.html>.