

# A Brave New World? Pronatalism and the Future of Reproductive Technologies

*Ji-Young Lee*\*

ji.young.lee@sund.ku.dk

## ABSTRACT

A global trend of institutionalised pronatalism situates low fertility as a site of demographic disaster – positioning primarily women’s bodies as both its cause and solution. In light of such demographic dread, assisted reproductive technologies (ART) may be utilized by pronatalist states as a strategy for fertility recovery, rather than as a benefit for individual aspiring parents. In other words, ARTs are at risk of being co-opted by nation-states for problematic demographic designs which do not advance emancipatory goals. The underlying issue of pronatalism, however, is not always explicitly acknowledged in feminist bioethics as a barrier to ethical ART usage. In my paper, I argue that it would be a mistake to assume ART can be used for emancipatory ends if we do not, at the same time, critically investigate its connections to institutionalised pronatalism.

## 1. Introduction

Aldous Huxley’s novel *Brave New World* (1932) contemplates a society in which reproduction is entirely removed from the bounds of intimate, bio-heteronormative kinship. In Huxley’s literary universe, the population of the World State is mostly sterilized. Monogamy is discouraged, because “everyone belongs to everyone else.” Marriage is obsolete. Children are not brought into the world spontaneously and voluntarily by ‘mothers’ and ‘fathers’, and certainly not through embodied pregnancies. Rather, procreation is an artificial process which is strictly controlled, with new members of society cloned into existence in batches via ‘hatcheries,’ and sorted according to social castes (of which members shall serve their role as designated ‘Alphas’, ‘Betas’, ‘Gammals’, ‘Deltas’, or ‘Epsilons’). Children are thereafter methodically indoctrinated and raised by the state, as captured in the following excerpt: “For you must remember that in those days of gross viviparous reproduction, children were always brought up by their parents and not in State Conditioning Centres” (Huxley 1932, 24).

\*University of Copenhagen, Denmark.

This scenario captures the radically transformative – yet morally ambivalent – power of reproductive technologies as essential tools for population control by the World State – to manage not only how many people are brought into existence, but to control also *who* is reproduced, and how they are placed in the world. While citizens in this fiction are thereby not subject to the messiness of social structures like the ‘family’, the abolition of family in this case is supplanted by another kind of disciplining force: the selective and controlled (re)production of citizens by the state itself.

While Huxley’s *Brave New World* describes what appears to be a stable and orderly society, many have read this work as a dystopic parable, “a kind of by-word for a society in which the values (or nonvalues) of scientific technology are dominant, and which has therefore reduced man to a species of machine.” (Firchow 1975, 301) At the same time, written in the wake of the Great Depression in England, Huxley’s work reflected “public anxieties about the supposedly degenerating hereditary quality of the population and how this decline would affect England’s economic and political future.” (Woiak 2007, 106) In this context, for Huxley “eugenics was not a nightmare prospect but rather the best hope for designing a better world if used in the right ways by the right people.” (Woiak 2007, 106) Hence, the moral quandaries expressed within *Brave New World* are not merely speculative; the work encapsulates “Anglo-American eugenic concerns and policies” (Woiak 2007, 110) and Huxley’s own preoccupations with overpopulation. (Claeys 2016)

All this is to say that the institutionalization of procreation, and the demographic anxieties which prop it up, are potent and morally ambiguous outside of fictional worlds like *Brave New World*. According to Michel Foucault, ‘biopolitics’ denotes Western political practices which emerged since the 18th century, aimed at managing the population (Foucault 2007, p.317) “as a set of coexisting living beings with particular biological and pathological features.” (Foucault 2008, 174) Biopolitical interventions are informed and rationalized through “techniques that aimed to measure, quantify, classify, and evaluate the immanent characteristics of a given territory,” (Means 2021) such as birth rates, life expectancies, incidence of disease, and so forth.

In precisely this way, reproductive technologies and the usurping of individual control over procreation have been used internationally by nation-states for selective population control since the early 20<sup>th</sup> century. (Connelly 2003) Different intellectual traditions influenced population interventions over this period. For instance, following Thomas Malthus’ view that overpopulation creates

poverty, Neo-Malthusians in 19<sup>th</sup> century England advocated for birth control as a means to secure economic security (Follett 2020), claiming that ‘rational’ (rather than ‘natural’) selection can limit procreation and better the human race. (Duggan 1915, 419) On the other hand, key eugenicists like Francis Galton – infamous for propagating (erroneous) racialized theories of population breeding – emphasized ‘positive’ eugenics, in which “selective marriage and large families among the fittest stock” was treated as “the best route to race enhancement.” (Soloway 1978, 272) By the early 20<sup>th</sup> century, eugenics “had spread across the globe in projects to govern life and death toward breeding better racial futures,” (Murphy 2017, 3) driven by “anxiety about the implications of uncoordinated population changes for race, nation, and/or empire.” (Klausen and Bashford 2010, 98) Thus, both pro- and anti- natal surveillance of ‘the population’ was mobilized on the basis of perceived existential risk, as expressed through ideologies like eugenics which are deeply embedded in legacies of classism, colonialism, racism, and sexism. (Andersson et al., 639)

Such historical attempts at the biopolitical discipline of populations, and the ideological doctrines underpinning their manifestations, have since been “challenged by feminist critics for justifying a host of reproductive abuses like eugenics-inspired sterilization campaigns and coercive, long-term birth-control policies.” (Cicerchia 2023) While it has historically been *anti*-natalist programmes which have come under moral scrutiny, like China’s one-child policy (Ng 1986) and sterilization campaigns used around the world (Rowlands 2022), it is evident that the institutionalized *pro*-natalism we now see emerging globally in efforts to *reverse* trends of falling fertility are equally worthy of moral critique.

In 1994, a group of Black women in Chicago coined the term *Reproductive Justice (RJ)* to expand on issues highlighted at the International Conference on Population and Development (ICPD) held in Cairo the same year. (Onwuachi-Saunders et al. 2019) Reproductive justice has now become a well-known critical framework “promoted by activist women of colour to more effectively describe how the intersections of gender, race, class, ability, nationality, and sexuality influence reproductive politics in the United States to produce a complex matrix of reproductive oppression.” (Ross 2022, 177) Importantly, the RJ movement decisively highlights all women’s rights to *have* children and to *not* have children, (In Our Own Voice: National Black Women’s Reproductive Justice Agenda; SisterSong) and has principally focused on topics like inclusive and equitable access to contraception and abortion, as well as condemning the horrors of forcible sterilization targeting women of colour (Kluchin 2011). The

reason I bring up the concept of reproductive justice herein, however, is because I believe this framework is also apt to capture *evolving* injustices in global reproductive health and population policy today – much of which now lies on the *pro-natalist* side of the decision-making continuum on procreation.

Donna Haraway's work is one example of an explicitly feminist, *non*-natal articulation of demographic navigation that aligns with, rather than maligns, reproductive justice. In particular, she articulates that “motherhood is not the telos of women...a woman's reproductive freedom trumps the demands of patriarchy or any other system.” (Haraway 2016) Moreover, her view is that population *decline* – through voluntary choice, and not of the population control enabled by eugenic or neo-Malthusian biopolitics – is in fact a desirable outcome for the flourishing of human, and non-human, kinds. In order to achieve this ‘multi-species ecojustice’, therefore, she has called for *making kin, not babies*, where kin-making goes beyond “entities tied by ancestry or genealogy.” (Haraway 2016)

Continuing the work of connecting state-level oppressions with reproductive technologies and ethics is, in my view, a most important and timely task in 2024 and beyond. In particular, it is crucial to not only explore the ethics of decreasing the population *contra* coercive versions of anti-natalism, as Haraway proposed, but to reflect also on the moral palatability of pronatalist strategies aimed at increasing the population. Besides the *content* of anti/pro-natalist biopolitical interventions and their technical implications, what warrants scholarly investigation are the complex *reasons* and *justifications* for their mass deployment in the real world. After all, if one of the chief aims of biopolitics is “to increase economic productivity by changing the habits and improving the health of individuals, and by encouraging reproduction and the growth of population,” (Rusnock 2018) the role of reproductive technologies and their justificatory logics in biopoliticized social systems merit continued scrutiny today.

In my own article, therefore, I will elaborate on the emerging threat of institutionalized pronatalism as an instantiation of potentially objectionable population targeting at work. Much like how anti-natalist policies and technologies harmfully implicate people in the context of institutionalized attempts to curb population growth, I hypothesize that in today's context of population decline, resources like reproductive technologies are inevitably made to collude with pronatalist logics in ways that are in tension with the interests of women and would-be gestators. That is, *pro*-birth and population *growth* logics (of certain ‘desired’ people) are dominating discussions about demographic transition (and

crises) worldwide, particularly in the Global North and including the Anglo-American contexts on which this Introduction was focused. This is something we must grapple with as bioethicists (and otherwise) as a matter of reproductive (in)justice in our discussions about good and bad uses of assisted reproductive technologies (ART) in the real world.

So how are reproductive technologies contextualized, narrativized, and orchestrated, by powerful (and imperfect) institutional entities like nation-states? I legitimize my theoretical hypothesis in several parts. In Section 2 (“Tiers of pronatalism: From the individual to the institutional”) and 3 (“The global ‘problem’ of falling fertility”), I introduce an account of institutionalized pronatalism, situating it as a truly ubiquitous issue with patriarchal, nativist, and ethno-nationalistic tenets. In Section 4 (“Reproductive technologies and emancipatory ideals”), Section 5 (“Pronatalist appropriations of ART usage”), and Section 6 (“ART trajectories in a pronatalist world”), I demonstrate that we can expect pronatalism(s) to constitute a serious barrier for the emancipatory operation of ART for time to come, and that bioethicists must acknowledge this reality. Overall, I hope to reveal why we ought to treat pronatalism as a grave issue with ramifications for the future of ethical ART usage and the interests of women and would-be gestators in particular.

## 2. Tiers of pronatalism: From the individual to the institutional

In order to understand how ‘pronatalism’ poses a challenge to the ethical use of assisted reproductive technologies, it is important to first characterize the various forms that pronatalism can take. The personal or *subjective* interest anyone might take in having offspring – call this *individualized pronatalism* – is a highly relevant social norm, though not necessarily the understanding of pronatalism I want to address (directly) herein.<sup>1</sup> Instead, I focus on state-level *endorsement* of pronatalism for the sake of demographic manipulation – call this *institutionalized pronatalism* – as presenting a growing conflict of interest for the ethical implementation of ART.

<sup>1</sup> It should be noted that personal motivations for procreation may of course echo or reinforce the demographic purposes of statist pronatalism, in which case it is of course possible for individuals to collaborate with social institutions like the state on matters of population growth. My point in making the somewhat artificial distinction between ‘individual’ and ‘institutionalized’ pronatalism, however, is to at least allow for the possibility that subjective wishes to procreate often do come apart from demographic designs articulated at the state-level.

Though individualized pronatalism does not necessarily come apart cleanly from institutionalized pronatalism, the latter may still be distinguished from the individual kind in some basic (though non-exhaustive) ways. First, institutionalized pronatalism is motivated and mobilized for state-level objectives, rather than by individuals with a *psychological* desire to have children. This relates to the fact that institutionalized pronatalism “serves economic ends by ensuring a steady supply of workers, consumers and taxpayers.” (Bajaj 2023, 52) As such, the individual motivation to experience pregnancy is not necessarily ‘pronatalist’ in the relevant sense, but state-level instalment of incentive structures which encourage masses of people to have babies is ‘pronatalist’ in the relevant sense. Secondly, institutionalized pronatalism is expressed through actionable policies, laws, and other principles which endorse the (selective and controlled) *increasing* of the population. Thus, the individual wish for a parent to provide their only child with a sibling for relational purposes is not necessarily ‘pronatalist’ in the relevant sense; however, the enactment of state coverage for In Vitro Fertilization (IVF) to tackle secondary infertility as a way to increase the nationwide birth rate is plausibly ‘pronatalist’ in the relevant sense. Finally, much like the institutionalized *anti*-natalism(s) acknowledged in the Introduction, institutionalized *pro*-natalism tends to be closely accompanied – if not outright justified – by various ideological tenets, such as patriarchy, ethno-nationalism, and nativism. For example, Israel is a well-known case of a nation-state in which its generous universal coverage of fertility treatment – with the “highest per capita rate of infertility therapy in the world” (Raucher 2021, 5) – is understood to be symbolic of a pronatalist “state interest in a ‘naturalised’, ‘gene-based’ notion of Jewish identity,” (Birenbaum-Carmeli 2009, 1018), especially as a way to counter a perceived demographic threat from Palestinians. (Raucher 2021, 5) While such ideological legacies of institutionalized pronatalism(s) will of course vary from nation to nation (as I will show in the next section), it is likely that we will find some form of the aforementioned going hand-in-hand with ART usage wherever demographic fears are catastrophized.

There are other ways to further shore up pronatalism, for example by distinguishing between ‘direct’ and ‘indirect’ policies, and so on. For the purposes of this article, however, I believe that the basic (if somewhat artificial) sketch I provided above should be sufficient to set up my discussion of instances where institutionalized pronatalism can be morally problematic. My basic characterization of institutionalized pronatalism captures the highly substantive and evaluative nature of pronatalism in the way that scholars have discussed, as an ideology

linked to “strong nationalism, explicit racism, fascism, imperialism and eugenism.” (Heitlinger 1991, 345) By treating pronatalism as a heavily value-laden framework entrenched at an institutional level, it becomes possible to begin thinking about pronatalism not only as an abstract individual ethic favouring private endeavours in family-making, but as a powerful state-endorsed narrative through which demographic anxiety – and ultimately *selective* population increase – is addressed and negotiated.

### 3. The global ‘problem’ of falling fertility

The core issue for pronatalism and the object of state-level demographic panic is the so-called “problem” of declining birth rates. To find the ‘problem’ of falling fertility, we have to zoom into the demographic composition at the continental and national levels and consider the downward trend in worldwide *total fertility rate* (TFR) that has occurred over time. Around 48% countries around the world now have fertility rates below the ‘replacement’ level of 2.1 children per woman, (Tan 2024) with much of this attenuation also affecting the Global North. Africa and Oceania are the only regions in the world with fertility rates above replacement level. (Statista 2023) The average TFR globally hovers just above the replacement level at 2.3 children per woman as of 2024, but this is a drastic reduction to what the global average once was in 1950: 4.9 children. (Statista 2023)

On the one hand, we might take low fertility to be a perfectly unsurprising outcome of the burgeoning wealth and social progress the world has seen: availability of contraception, education, urbanization, women’s participation in the labour market, and so forth (de Silva and Tenreyro 2017; Mills et al. 2011). Yet declining fertility at the microcosmic, *national*/scale is becoming a fraught topic which many nation-states are viewing through a ‘demodystopic’ lens – that is, from the perspective that demographic changes like fertility decline can bring about a kind of *dystopia*. (Domingo 2008) This dystopic thinking is apparent in ongoing worries over aging populations, strains to healthcare systems, pension deficits in the domain of a shrinking labour force, emigration, and so forth – all issues which have been catastrophized in juxtaposition with falling fertility rates by various countries. (Lutz et al. 2019, 7) Hence, heightened state-level interest in techniques like IVF and other ART as a method of increasing national births is foreseeable in such social climates. (Cha et al. 2023)

As detailed in the Introduction, demographically anxious narratives echoed by governments, media, and other public entities, are unlikely to be neutral in relation to the *kinds* of people that ought to be reproduced for generations to come, *where* they should come from, and *who* should be responsible to procreate them. Several morally concerning ideological dimensions stand out in alarmist logics of institutionalized pronatalism: first, there is an inevitable instrumentalization of customarily *women's* bodies, given they are represented as the embodied makers and bearers of future generations. Secondly, institutionalized pronatalism can betray nativistic and ethno-nationalistic prejudice relative to the identity and future of the relevant nation(s).

For example, in Asian countries with 'ultra-low' birth rates such as China, Singapore, South Korea, and Thailand, the call for (more) children is specifically a call for "particular ethno-nationalist children," (Whittaker 2022) as few of these countries are willing to "dilute their ethno-nationalist population's structure by encouraging increased migration which could rapidly re-engineer their population profile." (Whittaker 2022) And, as to be expected, this has meant also that native women, as citizens of any such nation-state, must bear the brunt of this demographic anxiety. In countries like South Korea, which has the lowest TFR in the world at around 0.8 children per woman, (OECD 2024) we can see the consequences of pronatalist logics play out as calls to tradition and gender-divisive disputes about feminism. (Motin 2024) The patriarchal pronatalism of South Korea has spurred in response a radical feminist movement of Korean women, known as the 4B movement, in which marriage, childbearing, dating, and (hetero)sexual relationships are rejected by its members as a protest against the wrongness of the state's attempted instrumentalization of women's reproductive capacities to resolve its 'demographic crisis.' (Solé 2023)

In Europe, the demographic alarmism of many countries can be tied to sentiments about the replacement of 'native' citizens by immigrants, and the perceived propagation of ethnic and religious minority and low-income populations as a threat to the Christian nations of Europe. (De Zordo et al. 2022) In Central and Eastern Europe (CEE) where there ethnic homogeneity and lower levels of immigration is common (e.g. Hungary, Poland), narratives about fertility decreases in socially dominant groups have been explicitly used by right wing politicians to fuel anti-immigrant sentiments and reinforce traditional gender roles: not wanting to have children as a (so-called) native citizen is unacceptable, as it threatens the very survival of the nation. (Szalma & Heers 2024, 90) In such contexts, too, the maternity of willing native women come to symbolize the



proper propagation of European nations gripped by concerns about threats to its cultural identity.

In the United States, patriarchal and ethno-nationalistic anxieties are par for the course in right-wing populist responses to falling fertility. Since the twentieth century, national campaigns for reclamation, conservation, country life, and eugenics have been characteristic features of American pronatalism. (Lovett 2007) As Perry et al. argue, in the American environment economic concerns apropos of declining national fertility are arguably rooted “by a desire to institutionalize an ethnically specific, traditionalist, Christian social order as well as by fears that traditional ethno-cultural hierarchies (in which Whites and Christians were dominant) are being toppled and reversed.” (Perry et al. 2022) Of course, this squarely implicates certain women’s bodies as essential instruments through which the nation must secure itself, “placing women at the heart of the project of reproducing the nation—literally as biological containers, symbolically as the nation’s property, and socially as those responsible for enculturating children.” (Rasmussen 2022, 1081)

Overall, it is clear that even in this very brief survey across continental and cultural borders, institutionalized pronatalism embeds patriarchal, nativist, and ethno-nationalistic ideologies in various forms. In this non-ideal, pronatalist world, those identified as the suitable would-be gestators of future children have the paradoxical potential to be treated either as saviours of the nation for taking on the responsibility to become ‘mothers’, or else to be vilified as selfish for choosing otherwise. Pronatalism permeates every aspect of life “for most women in cultures across the globe,” (Bajaj 2023, 45) and pronatalist messaging often targets women rather than men. (Brown and Ferree 2005, 12) Thus, it seems to me plausible to situate the following – and rather morally ambivalent – notion as an emerging motive for ART distribution and usage at the state-level: because certain citizens (i.e. women and would-be gestators) ought to procreate, *especially* to save the nation from the supposed demographic disasters anticipated by population decline.

#### 4. Reproductive technologies and emancipatory ideals

*Assisted reproductive technologies* are biomedical interventions intended to assist people with procreation where ‘natural’ conception is not possible. *In Vitro Fertilization*, a technique in which sperm and ova are fertilized in a lab, has been used since the late 70’s and is perhaps the most well-known and used form of

ART presently. The prevailing ground for ART is clear: its primary goal is to treat infertility or to otherwise help people achieve pregnancy. (Jain and Singh 2024) There is, additionally, the purported liberal value of ART, which narrativizes options to partake in ART as expanding the reproductive autonomy of women. (Beckman and Harvey 2005; Lee 2022)

However, ART usage is arguably morally ambivalent, because their usage can reinforce traditional, bio-essentialist ideals about motherhood, rather than to ameliorate such norms. (Bhardwaj 2023; Hammons 2008) Indeed, the “social pressure to produce biologically related children” (Donchin 2015, 1) may amplify precisely because ARTs are framed as viable and obvious choices for the modern woman. This is plainly relevant in high-fertility societies where parenthood is treated as ‘culturally necessary,’ (Inhorn 2009) but *also* in low-fertility settings where demographic apprehension at the state level are married to pronatalist attitudes. Feminist thinkers have highlighted the influence of “male control of reproductive technology” within male-dominated fields like medicine. (Rowland 1987, 517) Due to such concerns, it has been claimed that “women are now perceived as body-plantations and living tissue and cell banks, by others and sometimes also by themselves.” (Gupta and Richters 2008, 248) Some might even go as far as to say that these technologies “violate the integrity of a woman’s body in ways that are dangerous, destructive, debilitating, and demeaning...” (Raymond 1993)

In any case, social inequalities differentiate between who can utilize ART for family-making ends in the first place. ART represents “an elite medical consumer item that is not broadly or equally accessible.” (Harwood 2018, 101) This is of course due to the fact that ART services are a “complex product of public and private health policies and economic, political, and social/cultural forces that determine the allocation of personnel, equipment, and facilities.” (Nachtigall 2006)

The potential reification of the bio-heteronormative status quo in family-making, and the exclusionary potential of ART access, led some feminist bioethicists especially to condemn such discriminatory exploits of ART. (Peterson 2005; Ryan 2009) That is not to say that we ought to reject the very *existence* of reproductive technologies; rather, their criticism often speaks to the selective ends for which these technologies are utilized, and the question of who might get to benefit from them and how. (Donchin 1996) Bioethicists have therefore already advocated for practices of ART usage which ensure expanded, non-discriminatory access, and which support renegotiation of the boundaries around

gendered parenthood and family-making in more inclusive ways. (Warnes 2019) Apart from simply making IVF accessible to more people, the importance of methods like gestational surrogacy, for example, has been discussed as a mode of facilitating gay aspiring parents – rather than only heterosexual aspiring parents – to have biogenetic offspring. (Schwartz 2016, 55) More speculatively, the concept of artificial placentas and ‘ectogestation’ (gestation outside of the human body) has prompted discussion about the possibility to free women’s bodies from the ‘primary’ oppression of childbearing and childrearing roles (Firestone 1970, 72), as famously articulated by feminist Shulamith Firestone in the 70’s in *The Dialectic of Sex: The Case for Feminist Revolution* (1970). These are just a few examples of ways ART usage has been optimistically and radically envisioned as a means of potential individual emancipation from rigid and oppressive designations of gender, and ideas about what – or even *who* – is ‘normal’ or ‘natural’ in the sphere of procreation and parenthood.

While individual demand for inclusive access to ART is one such aspect which can bring emancipatory ideals to life, institutional bodies such as healthcare systems and nation-states are also key actors with agenda-setting power when it comes to the question of how we ought to use ART and to what ends. Aspects such as public funding, liberalization of ART access, and better promoting non-discriminatory uses of ART are some obvious first steps, according to the literature. (Dadiya 2022) Yet even this is far from sufficient, in my view, when it comes to fully materializing the various emancipatory visions of ART usage. This is because the potentially liberatory benefits of funding, liberalization, and non-discriminatory ART usage are clearly complicated by the various, non-ideal, *pronatalist* social backdrops of ART uptake today.

This risk is surely exacerbated if reproductive medicine and fertility treatment come to represent a relatively easy and politically preferable channel through which nation-states can express (and at the same time, mask) nativist preferences for the bio-heteronormative reproduction of their nation(s) in executing their demographic objectives. The technical possibilities of ART may in this way “[revitalize] political imaginaries in which reproduction [is] a changeable realm where not only personhood and family, but nation, decolonization, economics, freedom, and even world futures [are] at stake.” (Murphy 2010, p.69) After all, mass immigration as a demographic solution is largely viewed as an unfeasible or politically undesirable option, whereas encouraging women to have more children is at least less controversial if not outright ‘natural’. (Bala-

banova and Simonstein 2010) As such, it is unsurprising that many below-replacement level TFR countries are turning to ART as a technological stopgap solution to combat low fertility. (Bajaj 2023, 54)

It has been claimed that apart from factors like national wealth, pronatalist policies are a driver of higher ART utilization. (Lass & Lass 2023) ART has been conceptualized as an important “part of broader pronatalist policies that support individuals to have children.” (Choi et al. 2023) As the total fertility rate declines across many parts of the globe today, the “growing utilisation of ART has become relevant” (Lazzari et al. 2021, 1091) because it presents “an opportunity to help prevent the ongoing decline in TFR.” (Ziebe and Deroy 2008) Hence, ART is “regularly included among the policy responses to low fertility rates,” (Lazzari et al. 2023) and may be prioritized more and more for the politicized purpose of “[supporting] fertility recovery in the context of delayed childbearing.” (Kocourková et al. 2023) Of course, successful use of ART can narrow the gap between *desired* and *achieved* fertility in low-fertility contexts (Seiz et al. 2023, 44); but the urgency by which pronatalist nation-states are their interests in ART may be primarily as a demographic instrument, rather than mainly to alleviate *individual* suffering from infertility.

While we might reasonably expect to see improvements in ART availability and access for time to come, this may simultaneously come at a steep moral cost – especially to would-be gestators and their bodies – in light of intensifying pronatalist designs. This pronatalist background is not much explicitly represented in current bioethical literature on the subject of ART usage. In my view, however, it cannot be assumed that emancipatory uses of ART will come to life so long as ART is *provided* to everyone equally. We must, at the same time, remain vigilant of the pernicious pronatalism which can hide behind the commonsense presumption that the purpose of ART is merely to treat individuals’ infertility or to expand their reproductive autonomy.

In my view, the moral *problem* of pronatalism in the ART context arises precisely because the seemingly universal, and innocuous, value of having children (i.e. “child wish”) can simultaneously be co-opted by nation-states as a site on which to pursue potentially pernicious kinds of selective reproductive control. The *objective* of individual and institutional pronatalism easily overlap on the surface, even if the reasons differ: in both cases, *making babies* is the common goal. But the appearance of this common goal also obscures a potential conflict of interest in ART usage at the individual vs. institutional level. Whereas individuals might (ideally) want to utilize ART as an exercise of their reproductive

freedoms and procreative autonomy, nation-states might exploit ART more as a way for certain kinds of children to be produced on behalf of the nation, with potentially ambivalent implications on individual reproductive freedoms. As others have pointed out, pronatalism which is driven by “patriarchal, social, cultural, political, economic, religious and nationalistic agendas” risks becoming an efficacious form of reproductive coercion. (Bajaj 2023, 41)

Unfortunately, it is not a happy coincidence that people think it is generally good or acceptable to have children, and that nation-states support more births too. Arguably, pronatalism rising to the social level has always existed in an objectionable cultural form, upheld by oppressive gendered standards invoking the so-called “maternal instinct” and “motherhood mandate.” (Purdy 2019, 114; Russo 1976) The existing cultural components which conflate womanhood with motherhood, gestation, and so on, are *already* oppressive to women – whether the latter have children or not. This is certainly something that should continue to be critiqued. On top of this, however, the added sense that one is obliged to help raise the fertility rate of the country (on anticipation of facing censure for not doing so) is far from emancipatory, especially if ARTs are encouraged as fertility-saving or fertility-preserving choices. To the contrary, such standards frame the individual, and especially women, as near *duty-bound* or *responsible* to have children (more precisely, to procreate) – rather than merely having a free *right* to have children.

One might of course protest here that there’s nothing wrong per se with states encouraging people to have (more) children, as long as they are not actually *coercing* people to do so. After all, the global decline in birth rate might well be taken as evidence of the vast *freedoms* that people – especially women – have gained over their lives. To this I would say, firstly, that pronatalist coercion may still be present to varying degrees. Though outright denying women abortion rights is one example of forcible child-bearing, this is only one of the more extreme examples of pronatalist coercion. Anti-abortion rhetoric coupled with pronatalism is unfortunately one of the most concerning worries in many different countries, where abortion laws may be made stricter as a result (Shirdel et al. 2024), or else confront women with increasing difficulties accessing safe abortion services due to pronatalist attitudes from doctors and other healthcare professionals – even in the absence of legal restrictions on abortion. (Telli et al. 2019, 802)

Strong social pressures on women to marry, have children, and embody primary caretaker roles can also border on coercive, despite it technically being

possible for women to choose and prefer otherwise. In explicitly pronatalist countries like Hungary, for example, which offers generous parental leaves and family benefits, it has been argued that a ‘carefare’ regime encourages primarily native women to assume responsibility for childbearing and childrearing as natural caretakers, without public acknowledgement that “having more children will surely increase women’s care work load” on top of their participation in waged labour. (Fodor 2022, 46) This socialization of women *as* childbearing vessels is of course not unique to Hungary; in general, women who do not settle down and become mothers, and those who are childfree by choice, are often pitied, shamed, or stigmatized within pronatalist settings. (Rick and Meisenbach 206) Outside of academic contexts, earnest representations of childfree women in popular media are also rare. (Klecker 2023, 3) The derogatory term ‘leftover woman’ (sheng nü) which in China denotes educated unmarried women in their late 20’s, attests to the potency of such gendered social norms. (Ji 2015)

Secondly, we ought not to set the threshold too high for the critique of pronatalist thinking at the state level. The kind of gendered social norms noted above can be unduly co-opted for purposes which do not prioritize the autonomy or well-being of women and would-be gestators. That is, even if a nation-state is not physically, forcibly making people carry pregnancies, the subtle forces at play like the social norms around womanhood and motherhood which speak to an underlying pro-birth sentiment in society are worthy of critical reflection. While we might plausibly view ‘family-friendly’ policies such as parental leave and child benefits as a type of pronatalism which is intended to be helpful, rather than harmful, to individual aspiring parents, we should not thereby excuse nation-states from being answerable to their *reasons* for implementing such policies.

I have no objections to state-funded support for family-making as a matter of social welfare and decent reproductive care for all; my concern is that the conditions under which any individual can make choices about children are *already* heavily shaped by cultural norms which are oppressive to the people most implicated by embodied reproduction – that is, to women and other persons identified as would-be gestators. Given these preconditions, it would be naïve, in my view, for us to let institutional forces off the hook simply in case they are not outright *forcing* anyone to have children. This seems to me too high a threshold for making critiques about pronatalism. While I should hope that state-level pronatalist influences only enact benign effects on the welfare and autonomy of citizens, my reflections herein are intended to at least anticipate the possibility that

the influence may not be so benign, and to encourage further reflection about how to avoid worst-case scenarios.

### 5. Pronatalist appropriations of ART usage

In the previous section, I established how deployment of ART can be driven by pronatalist motives endorsed at the state-level and shaped by demodystopic narratives about the bleak future of humanity. But *how* do such motives actually impede or thwart the possible emancipatory applications of ART? In case the pronatalist motivation to fund and liberalize ART by itself did not seem convincing as a threat, I will lay out the concrete and concerning effects of institutionalized pronatalism on the ethics of how we practice reproduction with ART, and how this will likely shape morally ambivalent directions for ART usage looking forward.

Before I continue, let me reiterate that many of the pronatalist states now scrambling to raise birth rates have, historically, exercised *anti*-natalist population control. These measures are now widely condemned due to their violations on individual reproductive autonomy. Where some might consider the contents of anti-natalist policies to be fundamentally different than that of pronatalist ones, my view is that the justificatory logics of state-endorsed antinatalism are in fact perfectly analogous to the anxieties propping up pronatalist imperatives: in any case, we can detect fears about preserving ethno-nationalistic identity, concerns pertinent to strains on the welfare state, depletion and scarcity of resources, and so on. In other words, antinatalism is the negative rendition of population projections which are demodystopic in their narrativization, whereas pronatalism is the positive version of the very same thing. It is curious that the global pronatalist turn of population policies have not quite reached the same levels of notoriety as that of anti-natalist policies past, given that the moral quandaries they raise are practically equivalent.

Moving on, we must also acknowledge that there are real-life examples where outward endorsement of ART in pronatalist countries have fallen short of liberatory individual interests and proved morally ambivalent overall. This may be due to hypocrisy about ART implementation, for example when countries claim to support ART provisions but without at the same time addressing barriers to access and other social injustices to better enable ART usage which truly serves all of its potential recipients. Subsidizing treatment only for a select group of

women, for example, or long waiting lists to undergo IVF, are just a few examples of the impractical barriers which make it difficult for all individuals to truly benefit from ART. (Zádori 2024; Szekulesz 2022) In my view, many of these disparities can be explained in terms of the conservatism and *selectiveness* which is often characteristic of institutionalized pronatalism. If so, this makes it all the clearer that extolling the virtues of giving birth and having children, in the abstract, is one thing, and that truly measuring up to an inclusive system of ART utilization and support for family-making for all persons is quite another feat. The point is that if support for ART is predominantly due to institutionalised pronatalism rather than for all people's emancipatory interests, we should not expect guarantees for ART to be distributed fairly.

Even in the case that ART is provided more equitably by the state, my view remains that specifically *pronatalist* support for ART might enact more harm than good for its users, especially to women and would-be gestators, due to a conflict of interest. Potential conflict of interest is not even a new topic ART practice: in the case that clinics might profit from the storage of gametes or embryos, for example, it would be unsurprising for the personnel to recommend preservation and keep service users in the system, perhaps even incentivising the super-ovulation of women "in ways that may be contrary to their health interests and reproductive options." (Dickens 2002, 344) While this is a familiar ethical concern in association with ART and *commercialization*, an analogous issue arises in the case that ART is driven by institutionalized pronatalism.

State-sponsored elective egg freezing (The Korea Times 2023; Lin 2022) is now available in a few countries around the world. It is a paradigmatic example of a seemingly generous pronatalist ART provision supposed to benefit women in terms of circumventing age-related infertility. (Katsani et al. 2024) In my view, however, it is unclear why such provisions should be expected to emancipate women from the challenges raised by the gendered parenthood norms imposed on them, including social pressures to bear children even at a later age, come what may. As such, promoting egg freezing can clearly mask "sexist social expectations and threaten women's autonomy." (Petropanagos 2010) While it is vital to acknowledge that inequalities *preventing* women from accessing elective egg freezing may also be an issue, encouraging egg freezing as a manner of fertility preservation motivated by pronatalist concern is problematic and short-sighted, for several major reasons. Firstly, it encourages more women to undergo a burdensome medical process for the sake of egg extraction, eventually subjecting them to social demands to bear children later in life; secondly, it may



raise false hopes about baby-making later in life where the actual chances for successful implantation are slim (Shkedi-Rafid and Hashiloni-Dolev 2011); finally, the option of elective egg freezing does not in itself overturn the ongoing societal challenges women face in the area of family-making, including the paradoxical pressure on them to settle down, hold down a job, *and* shoulder the majority of caring duties and home responsibilities – demands which may have been part of the reason some women delay childbearing in the first place. In other words, pronatalist sponsorship of ART is in conflict of interest with the target group, who might not actually be best benefited from having such schemes made available to them.

It is crucial also to keep in mind that success rates for IVF have plateaued, with few clinics reporting success rates over 40%. (Sadeghi 2018, 67) Undergoing IVF can be especially difficult, or even barred, for older women. Hence, medicalizing the “problem” of low fertility in women’s bodies whilst failing to address related issues such as the actual efficacy of ART, environmental factors contributing to infertility, and so forth, puts them at risk of preventable suffering. Offering fertility treatment can only go so far when not well-integrated with other aspects of maternal health care and family planning. (Ombelet 2011) That is not to say that ART provisions should not be made at all; the problem here is that leading the way for ART practice with a *primarily* pronatalist format of justification is plausibly deleterious for a truly informative and empowering use of ART by individual women. By hedging demographic fears through the guise of overtly optimistic ART interventions framed as beneficial or empowering to women, but which are in fact quite likely to affect individual women negatively, it is hopefully obvious why prioritizing the goal of boosting fertility at any cost is not going to serve anyone’s emancipatory interests.

We have also seen logics of support for ART which have at the same time proved to be mutually exclusive with women’s reproductive rights, and therefore reproductive justice, especially around *preventing* pregnancy and childbirth or other areas of reproductive health. In countries like South Korea, despite “unprecedented incentives to couples seeking to have children, such as expanded maternal/paternal leave, financial aid for infertile couples, and childcare benefits” (Kim 2019), reproductive and maternal health have barely improved since the implementation of such pronatalist policies. Moreover, despite abortion once being widely practiced in the country when *over*population was a concern from the 60s to 80s, in the 2000’s the government banned access to abortion

and removed contraceptives from the national health insurance while promoting the use of ARTs as a pronatalist response to falling fertility rates. (Kim 2023)

This shows us that a commitment to the funding and promoting of ART should not in itself be assumed to spell good news, as it can undoubtedly overlap with social circumstances where the reproductive rights of women – especially their right *not* to have unwanted pregnancies or have children against their will – are more uncertain than ever. Some aspiring parents may of course benefit from policies that make ART accessible to them; but aspects like the *restriction* of abortion rights for women show that the liberalization of ART access is insufficient for emancipatory and morally acceptable reproductive care *overall*. Policies which claim to be family-friendly but which are *merely* pro-birth, and not accompanied by the explicit right to safe abortions nor improvements in obstetric care, should not be considered family-friendly in the relevant sense. When the logic of pronatalism clashes with the option not to be pregnant or to have children, the reproductive autonomy of all would-be gestators is plausibly harmed. We ought to be careful and weary of ART support which does not at the same time establish sufficient care and basic reproductive rights for women and would-be gestators.

## 6. ART trajectories in a pronatalist world

As the above passages demonstrate, ART practice can easily be a morally murky exercise. Even seemingly *positive* developments like more generous state funding of ART, and better access to ART, is not sufficient to spell out an entirely emancipatory pathway of ART usage. Without a clear-cut “woman-centered reproductive agenda” around ART implementation which highlights the needs of all women and would-be gestators, they will plausibly “continue to be exploited by...our sexist society.” (Murphy 1989, 82)

So what might we conjecture for the future of ART use given the pronatalist directions that many countries around the world are taking? It does not seem like such a stretch to worry that a strongly pronatalist state might resort to attempts at reproductive control *against* the prospective parents’ own reproductive autonomy, interests, and rights. Even the guise of empowering, family-friendly policies can mask chiefly pronatalist motives which may or may not ultimately align with individual interests. Continued alarm about the blurring of state and individual interests in the arena of procreation is therefore warranted, and in fact necessary if we care about ethical applications of ART.

State powers have already barred people from being able to access and control their frozen embryos. (Sussman 2019) The decision of The Supreme Court of the United States (SCOTUS) in 2022 to revoke constitutional rights to abortion has renewed heated debates about the legitimacy of concepts like foetal personhood and state powers over women's bodies, *contra* women's autonomy and reproductive justice. (Manninen 2023) In a pronatalist world, who is to say that nation-states would not adapt the possibilities of ART for pronatalist interests, for example by compelling gamete donors or people with leftover frozen embryos to hand over their materials to the state for procreative purposes? Where individuals' – especially women's – interests are divorced from that of the state, it appears that even technologies which have been discussed positively in feminist spaces, like ectogestative technologies, are at risk of being seized as devices which unduly enforce more births on behalf of the state. For example, some have worried that the prospect of the artificial placenta may risk 'state-mandated artificial gestation' as a coercive alternative to abortion, (Hendricks 2011, 7) or a commodification of the process of pregnancy. (Rosen 2003, 72) While such speculation may be sceptically read as a pessimistic caricature of what is actually possible at present, the lesson to be taken away from this discussion is surely that good use of ART cannot simply be assumed once we have ticked off surface level issues which relate to equality, access, funding, and so forth. Establishing truly emancipatory manoeuvres of ART may be a difficult and complicated path in our non-ideal world, where the kind of institutionalized pronatalism I focused herein is so prevalent.

Where do we go from here? I hope I have made it clear that an ethics which takes individuals' (and especially women's) interests, values, and rights to be central is necessary to inform the ongoing development and deployment of ART. Institutional demographic trepidation regarding low fertility clearly derails the use of ART for emancipatory ends, since state-level pronatalist exploits of ART in these social environments may not prioritize individual ethics or reproductive justice. *Caring* about the ethical and responsible uses of reproductive technologies, and simultaneously accepting that a higher *total fertility rate* must not become the only end goal in reproductive medicine, must be made an explicit priority. Reproductive justice calls on us bioethicists to critique the deleterious consequences of institutionalized pronatalism, and to focus our attention on the variable harms and oppressions that might result from the imperative to raise birth rates whatever the cost.

## 7. Conclusion

A growing demographic unease about fertility decline around the world is motivating pronatalist nation-states to make ART readily available – to varying degrees – in order to help reverse declining birth rates. The bodies of those perceived as suitable would-be gestators, *are* a grounds on which nation-states around the world are betting on their futures. As it so happens, ART is a convenient and covert way to align individual desires for children with national efforts to boost birth rates. The appearance of the liberalisation and acceptance of fertility treatment and ART, therefore, should not be assumed as a sign of social progress or be taken as a sure sign that emancipatory interests are being realized in the reproductive realm. On the contrary, institutionalized pronatalism presents one of the most inimical challenges to morally good ART use and development for time to come. State-level endorsement of ART can mask rather nefarious schemes which prioritize state-level objectives and do not place individual interests and needs at the core. I hope to have shown that if we really want ART to be operationalized for emancipatory ends, we cannot just be advocating for funding, liberalization, and non-discriminatory ART usage (as is the focus of most bioethical discussions on ART) without accounting for institutionalised pronatalism as a major moral barrier. This is the principal insight of my paper which has the potential to nuance bioethical and philosophical discourses on ART usage. We must continue to contextualize, and scrutinize, the reasons for *why* ART might be sponsored and mobilized as part of state-level agendas targeting demographic change – in other words, for ends other than *individual* emancipatory interests – as a necessary articulation of reproductive justice.

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