

Bridging Ethics and Cross-Border Reproduction Technology Through Transnational Health Governance? A Materialist Feminism and Philosophical Reflection

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To what extent can innovative reproductive technology contribute to meeting the needs of intended parents and to address women's health and care issues in different milieus? This paper adopts a combined critical materialist feminism and philosophical perspective and examines the discourses and policy developments found in the cross-border assisted reproduction technology (ART), the US's and the World Bank's development and family planning policy in Africa. The paper argues for re-framing an ontological and epistemological space of 'the political' which can provide a robust ethical basis for accommodating diverse conflicting requirements and setting rules in a transnational shared health governance.

Keywords: transnational health governance, ethics of respect, responsibility and natality, bioethics and assisted reproductive technology (ART), donors and family planning policy in Africa

INTRODUCTION

Reproduction as a site of biopolitics and technological innovation has seen unprecedented dynamics accompanied by paradoxes and ongoing tensions in the past decades. Analysts agree that, regardless of anti- or pro-natality measures, those discourses involve different biopolitical rationalities ranging from early neo-Malthusianism intertwined with strategies of (nationalist) socioeconomic development, feminist health activism to marketization and regulation (Roberts, 2003; Waldby and Cooper, 2006; Frey, 2011; Murphy, 2012; Klich-Kluczewska, 2017). States and donors underlined the successes of twentieth-century population programs found in a moderate and rapid decline in the birth rate in those countries and regions which implemented coercive and selective measures through education work and contraceptives. Nonetheless, population control and the related reproductive health issues have found no global consensus whose discourses remain heavily laden with ideology, emotion and ethical tensions (Connelly, 2008, p. 368-369; Solinger and Nakachi, 2016, p. 20, 22-26). Particularly, controversies accelerate while addressing the question of regulating rapidly developing assisted reproductive technologies (ART). They are associated with commercial practices that appeal to same-sex couples and women with infertility problem and deemed to promote their reproductive goals and well-being. At stake is the challenge how to remap social contracts and balance a complex matrix of competing claims of dignity of personhood in terms of reproductive freedom and justice¹ and resource-allocation (Amironesei and Bialecki, 2017, p. 3). Furthermore, many developing countries (notably in Sub-Saharan Africa (SSA)) continue to suffer from weak provision of reproductive health service due to the lack of resources affected by the US's recurring ideological opposition to abortion. Even the feminist contribution to empowering women might have

become part of biopolitical arrangements as found in its politicized discourses regarding technical details of reproductive health (Murphy, 2012; Takeshita, 2014, p. 250-251).

In view of these multifaceted controversies, ethical tensions, policy paradoxes and ambivalence, we are intrigued by the concern whether reproduction issues can be approached differently in today's high-tech globalized world. The questions arise: To what extent can innovative ART suit the needs of intended parents and to efficiently address women's health and care issues in different milieus? Can a transnational health governance system derived from a combined ethico-onto-epistemology (Barad, 2007) with transformative agendas (i.e. an ethic of care; redefinition of the relationships of personhood, society and technology as well as sustainable bioethical governance) provide sources to address those tensions and paradoxes?

This paper contributes to continuing ongoing reflection found in the existing literature. It focuses on the hidden face of systemic power (Stone, 1980) and explores the space of an ethico-onto-epistemology in multiple complicated webs of biopolitics. Instead of looking at individualized fragmented acts of reproduction, it encourages to remap the nature, logic and purpose of reproduction in terms of its assemblages, change, multiplicities, materialities, and processes (Deleuze and Guattari's *A Thousand Plateaus*, 1987; Taylor and Ivinson, 2013). In so doing, it pursues two main objectives. First, it aims to uncover those things that "haunt" forms of knowledge production and representation (e.g. objectification of infertile parents and surrogates; deletion of female agency etc.) and to raise awareness against the normalization of biopolitical automatism human persons and society are subjected to. Secondly, it aims to re-think the co-constitutive entanglement between knowledge domains surrounding reproduction issues and to highlight the manifestation of open and heterogeneous configurations and resources a transnational health governance frame can provide through re-designing its onto-epistemological reasoning. Inspired by the ideas of freedom intertwined with "natality" found in Arendt's political ontology (notably *The Human Condition* 1998, see Diprose and Ziarek 2018), Emmanuel Levinas' notion of responsibility towards "the Other", Derwall's reflection upon "respect" (1977), and the redefinition of personhood, this frame will help the societies accommodate ethical pluralism and refrain from irresponsible practices. Part I sketches the utility and limits of the combined materialist feminist and Deleuzian philosophical methods to address the reproductive issues. Part II highlights and compares the story-telling of the focus cases from the (neo)positivist and the combined feminist and philosophical perspectives. In Part III, I show the design of transnational health governance with its basic principles and point out the possibilities this frame can provide for tackling multiple challenges and managing a range of reproduction practices.

WEAVING THE PLANE OF IMMANENCE: A DIFFERENT ONTO-EPISTEMOLOGY IN APPROACHING REPRODUCTION ISSUES

The choice of new material feminisms and empiricisms as theoretical and methodological orientation is derived from the conviction that the existence of being as a process of becoming shown in multiple entanglements can no longer be approached in reductionist and binary thinking. As part of the critical endeavor, both approaches encourage us to view reproduction "in terms of change, flows, mobilities, multiplicities, assemblages, materialities and processes" (Taylor and Ivinson, 2013, p. 665). The following paragraphs present several key notions and methods of the new material feminisms and empiricisms which offer a different onto-epistemology for "laying out a different plane of thought" (St. Pierre, et al., 2016, p. 100) while approaching the reproduction matter.

The newness of new materialist feminisms and empiricisms lies in their efforts to break with the foundationalist tradition through theorizing the *co-constitutive* relationship between cultural discourse and materiality (Fox, 2015, p. 8-9). In comparison with post-structuralists' ignorance of "the reality of the body", the turn to matter within health sociology which includes various aspects of materiality (e.g. the tissues of the body, physical and biological stuff etc.) has shifted the research focus away from the textuality and social construction and moving towards the materiality of social production. In particular, new material feminisms' account to displace the human as the principal ground of knowledge and to bestow matter the status of 'agency' which is alive and active in the process of social production has

marked a radical ontological shift with transformative epistemological implications. The diffusion of object/subject and the idea of experiencing ego-loss urge us to rethink everything what we take for granted, to think *outside* normalizing discursive-material structures that limit us, and to create “conditions under which something new, as yet unthought arises” (St. Pierre, et al., 2016, p. 104). As such, an emergent field of enquiry - the posthumanities - have justified its efforts to redefine and to expand humanities’ boundaries which are based on the convergence of posthumanism and post-anthropocentrism while pursuing emancipatory agenda (Braidotti, 2019; Deleuze and Guattari, 1977). Deleuze and Guattari, for instance, have laid out a pre-philosophical “plane of immanence” or a body without organs (BwO) which is composed of unformed matter and involves a healing process whose major task is “to destroy the oedipalized and neuroticized individual dependencies through the forging of a collective subjectivity, a *nonfascist* subject” (Seem, 1977, p. xxii-xxiii, in Deleuze and Guattari, 1977). In this plane of immanence, new frontiers of knowing are opened through providing new concepts and parameters. As noted by St. Pierre et al. (2016, p. 103), these concepts cannot function and thought “on Descartes’ plane that grounds much social science work”.

Meanwhile, concerns arise with regard to the changing meaning of the body and its blurred lines with genetic manipulation reflected in enhancement technologies (Wilson, 2016a; Ranisch, 2014). The critics of posthumanists know that the prospects of technological advancement in shaping human life and inducing a moral vertigo are unavoidable, they thus demand foresight and vigilance while confronting the hardest questions “posed by cloning, children designing, and genetic engineering” (Sandel, 2007, p. 9, here cited in Ranisch, 2014, p. 4; Wilson, 2016a). Bearing in mind those caveats, we see new promises provided by the new materialist feminisms and empiricisms whose posthuman knowledge claims, as Braidotti (2019, p. 31) puts it, “go beyond the critiques of the universalist image of ‘Man’ and of human exceptionalism and offer diverse ontological outlooks...” These outlooks are relational, processual, realist, and cyborg. They assume radical immanence in upholding “the primacy of intelligent and self-organizing matter” (Braidotti, *ibid.*; Deleuze and Guattari, 1977; DeLanda 2006, cited in Price-Robertson and Duff, 2015; Haraway, 1989, p. 150). In other words, in place of many reified binaries, new materialists propose an “orientation to reality as multiple mediated process or becoming” (Brown and Stenner, 2009, p. ix, cited in Price-Robertson and Duff, 2015, p. 2) and begin to indicate how this new orientation may rejuvenate social research with a number of new approaches and concepts.

Approaching the Reproduction Matter in a Rhizomatic Reality

Among those new concepts and methods, the rhizomatic system (Deleuze and Guattari, 1987, p. 6-7) and its principles including the notion of “assemblage”, and the feminist method of “spooking, sparking and spinning”² are deemed as useful while approaching materialities and multiplicities of reproduction. “Rhizome” with its form of multiple roots means “many things” in the world and represents a powerful image to break with dualist thinking through attentively reading the existence of a multiplicity in a structure whose growth “is offset by a reduction with its laws of combination” (Deleuze and Guattari, 1987, p. 6) for the maintenance of a unity of totalization. In this rhizomatic system, one observes the layers upon layers of “the relationally interconnected, dynamically and quantitatively as well as qualitatively differentiated constituents of rhizomorphic reality”.³ Inspired by Turner’s series of paintings in London, Deleuze and Guattari (1977, p. 132-137) consider such a rhizomorphic reality as an embodiment of a something ageless fleeing process toward an eternal future with changing meaning, where the wall of a fascist dream shatters and everything “becomes mixed and confused, and it is here that the breakthrough – not the breakdown – occurs” (Deleuze and Guattari, *ibid.*, p. 132). In this process, the humans are encouraged to know how to leave, to scramble the codes of the established order, and to overcome the capitalist barrier and to invent new paths “leading toward a new solution concerning the future of man” (Deleuze and Guattari, *ibid.*: 134; see also Haraway, 1987, p. 150).

Mindful of Deleuze and Guattari’s relational ontology, health sociology has gained new impulses by viewing what a body *can* do, rather than what it is (Fox, 2015, p. 9). The body can no longer be regarded as an independent entity. Instead, as part of a multi-layered posthuman predicament that “includes the environmental, socio-economic, and affective and psychic dimensions of our ecologies of belonging”

(Guattari, 2000, here cited in Braidotti, 2019, p. 32), the body is “situated within a network of biological, psychological, cultural, economic and abstract relations to other bodies, objects, technologies, ideas and social organizations” (Fox, *ibid.*). As Fox (*ibid.*) puts it, “these relations affect and are affected by others in the assemblage”, which is “a distinctive, emergent composite, systemically open, substantively heterogeneous and of uncertain duration” (Amironesei and Bialecki, 2017, p. 4). As such, the idea of assemblage has inspired social scientists to develop new approaches in two major ways. First, the processes involving the creation (i.e. “territorialization”) and transformation or dissolution (i.e., “deterritorialization”) of assemblages have become focus of analysis that emphasizes heterogeneity, fluidity, and processes of becoming. Second, its theory may focus on hybrid entities and novel conceptions of subjectivity, identity, and agency which is resulted from some innovative steps through conceptual *mélanges* of the material and the discursive in combining “texts, discourses, bodies, affects, technologies, non-human ‘things’, and physical and social contexts” (see Duff, 2014, p. 27–35, here cited in Price-Robertson and Duff, 2015, p. 5ff). For instance, for DeLanda (2008, p. 253, here cited in Price-Robertson and Duff, *ibid.*), all assemblages can be characterized according to two dimensions: the first one identifies the “role which the different components of an assemblage may play, a role which can be either material or expressive”. The second dimension comprises varied processes which determine either “the emergent identity of the assemblage” or its destabilization “opening the assemblage to change” (DeLanda, 2008, *ibid.*). Another example is to illuminate the functions of assemblages through drawing “cartographies of the power relations operational in and immanent to the production and circulation of knowledge”. In so doing, we might reflect upon ‘what kind of knowing subjects’ we are in the process of becoming and the discourses underlying the process (Braidotti, 2019, p. 32).

Following the Deleuze, Guattari and DeLanda’s assemblage models, we might describe a reproduction/health assemblage such as:

- 1) Organ/body tissues - biomedicine - prospective parents/donors - ART providers and their service – affective economy/commodification/transnational surrogacy – state regulations/economic inequalities – values (autonomy and freedom) and rights
- 2) Family-planning policy and contraceptives – donors and SSA – pharmaceutical industry - family tradition – ideology and faith – women’s reproductive freedom - North/South health equity

From a DeLandian or Deleuzian perspective, “reproduction” in a health assemblage is associated with an ill-health assemblage, in which the problem of “infertility” or “childlessness” can be solved through undertaking various reproductive procedures provided by ARTs in order to enhance measurable capacity of a body (through In-Vitro-Fertilization (IVF) measures), thereby forming new relations. A reproduction assemblage then is constituted from the myriad of physical, psychological, economic, socio-political relations, ethical questions, and the affects that surround the body (of the prospective mother or the surrogate), prospective parents and children/babies, ART industry and service during an episode of family-making or transnational surrogacy. Furthermore, one can use critical feminist methods found in the science and technology studies (STS) to dissect the process of becoming in the reproduction assemblage. They involve a process of “spooking, sparking and spinning”: *Spooking* means “finding those things that ‘haunt’ forms of knowledge and representation” where female agency is absent while assessing work done or exploring sexist representations of women (Bauchspies and de la Bellacasa, 2009, p. 335). *Sparking* means efforts “to restore meaning creatively, making those same absences or silences collide, ironize, and creatively work together” (Bauchspies and de la Bellacasa, *ibid.*). *Spinning or weaving* resorts to new approaches to address familiar issues in new spotlight and “moving away from critique of patriarchal approaches, and instead ‘hearing forth’ (Morton, 1985) new insights” (Bauchspies and de la Bellacasa, *ibid.*). Hence, a new materialist feminism’s reading of the functioning of ARTs helps illuminate how prospective parents and surrogates involved are easily subjected to (innovative) bio-political experiments and transnational commodification process regarded increasingly as disciplinary automatism that might risk not only to erase the uniqueness of human person but also to downgrade “natality” as a process of new beginning (Arendt’s *the Human Condition* 1998).

The utility of new materialist feminisms and empiricisms in providing us with a different onto-epistemological reasoning and supporting our argument can be tested in the following comparative reading of three cases between the traditional rationalist thinking in forging a powerful nationalist/developmental and biopolitical agenda, on the one hand, and the new materialist feminisms and empiricisms, on the other hand. Such a comparative reading will provide alternative perspectives while examining the threats, paradoxes and ethical conundrums (non)-human agency faces today found in the reproduction matter.

WOMEN'S REPRODUCTIVE HEALTH: A COMPARATIVE READING OF THREE CASES

In spite of many path-breaking efforts in promoting women's reproductive freedom, it remains one of the most controversial social and political issues. Indeed, the progress of contraceptives and ARTs and the related abortion and procreation legislation have given women considerable sexual and reproductive freedom in both developed and developing worlds to make choice concerning their body and life. According to a statistics issued by the World Health Organization (WHO), each year, 74 million women are unintentionally pregnant. The birth control market therefore is huge and highly competitive. Emerging innovative products are ready to challenge traditional birth control pills, thereby possessing a great potential to give women a new sense of power in their sexual relations.⁴ Furthermore, a booming bioeconomy concerning the stem cells research and transnational surrogacy (e.g. the IVF-use in Mexico, India, Ghana and Denmark) has facilitated the ongoing high-quality embryology knowledge and skills transfer and begun to change the intimate boundaries of families, thereby challenging the notion of personhood and agency with consequences of social transformation (Mohr and Koch, 2016; Gerrits, 2016; Schurr and Miltz, 2018; Gaddie, 2018).

Meanwhile, the convergence of feminism and bioethics has flared up a bitter conflict in the border area between civil law, gender equality, ARTs, bioethics, and market liberalism. As found in the bioethical law revision efforts at the French national assembly in autumn 2019, the debates were centered not only on the extension of Medically Assisted Procreation (PMA) which shall guarantee the right to artificially fertilized oocyte implantation for *all* women.⁵ They also involved the question of the legal status of children born from surrogacy abroad. Several national judiciary decisions already have sent confusing messages. Whereas the German Federal Supreme Court granted a gay couple dual paternity for a child born in California to a surrogate mother, the same Court denied years later a German woman's maternity rights to a child born to a Ukrainian surrogate mother but hastened to add that she could adopt the child.⁶ Such inconsistent views surrounding the legal status of children born from surrogacy abroad only reveal an uncomfortable alliance between individual freedom and self-responsibility in shaping new family models and the ensuing booming motherhood market. This alliance unambiguously challenges the frontiers of bioethics and facilitates the emergence of what Sylviane Agacinski (2019) calls "a disembodied man" from the carnal to a made body in a progressive techno-medical era. More thrillingly, one day in front of the *only* abortion clinic in Mississippi shows how bitter the debate is about abortions in the US. On their way to the clinic which was "like running the gauntlet", the women and the doctors were continually harassed by pro-life activists.⁷ To date, those faith-based pro-life movements have influenced the US government's aid policy abroad particularly under the republican administrations. Rights groups have criticized that the US expansion of the global gag rule under the Trump administration will "punish women" worldwide.⁸ Moreover, feminists' efforts in fighting for women's reproductive freedom increasingly face threats from rightist extremism which views white women's sexual emancipation and feminism being responsible for the declining birth rate in Western societies and has thus justified its racist/discriminatory violence against migrants as well as against women.⁹ In other words, the reproduction matter manifests itself in a multi-layered rhizomatic reality, in which the neo-liberalization of life takes place in multiple assemblages intertwined with intractable ethical tensions, incompatible and concurring views, economic and social inequalities, policy paradoxes, and violence. Had women's reproductive biology been successful to disengage itself from the competitive state's nation-building project (Waldby and Cooper, 2006), it now has become part of naturalized

technologically assisted kinship (Thompson, 2005) with concurring extensive biomedical research interests, global commodification, clinic labor, policy instrument and even a justification ground for violence from rightist radicalism.

Recalling this paper's aim to explore new conceptual and theoretical resources through a different ethico-onto-epistemological outlook while understanding and analyzing the multiplicities of reproduction, we choose three cases which represent two variants of reproduction/health assemblage as shown above: ART and transnational surrogacy, family-planning programs of the US and the World Bank in SSA. In each case, a tailored comparative reading goes as follows: whereas the perspective of an ideological economic development thinking unravels the myriad of the reproduction issue involved, the view of the new materialist feminisms and empiricisms helps shed light on the blind spots and impasses of the neo-Malthusian perspective in terms of the following dimensions: the changing meaning of the material functioning of the reproduction assemblage and the cartography of its power relations and underlying discourses.

Cross-Border ART, Surrogacy and Their Controversies

For prospective parents, rapid progress in medical science and technology have opened a new horizon to overcome their experience of infertility “as a crisis of the self, the spirit and the body” (Ryan, 2003) and to pursue their interests through getting access to a host of ARTs, so that they can have a child to which they are biologically connected. As observed by several authors (Präg and Mills, 2015; Krawczak, 2016; Wilson, 2016b; de Wispelaere and Weinstock, 2017, p. 131), social demand for ARTs has grown rapidly as the related treatments become safe and socially acceptable. Europe is the largest market for ARTs, though a wide variation of state regulation exists ranging from some form of legislation to complete coverage of treatment via national health plans (Präg and Mills, 2015). Normally, legal marriage or a stable union is required to have access to ARTs. Only half of European countries permit single women and few grant further access to same-sex couples.¹⁰ Among those key treatments of ARTs, in vitro fertilization (IVF), frozen oocyte replacement, egg or sperm donation, egg sharing and stem cells research involve cases such as women being at risk to react adversely to the fertility drugs, gay male parenthood, surrogate motherhood, and delaying motherhood.

From the prism of the economic development discourse, ART and cross-border surrogacy are regarded as a useful means for prospective parents to realize their parenting aspirations. It is derived from the rationality paradigm which underlines the fundamental values of individual freedom and autonomy, intertwined with the early nationalist agenda in the reasoning of a competitive welfare state and becomes mostly driven by a neoliberal biomedical politics. Its task is supposed to account for “the conditions under which goods should not be sold, but also for what kinds of goods should not be for sale in a market economy” (Panitch, 2019). As such, this perspective sees state regulation evoked as a remedy “serving different goals of assuring quality care and preventing medical malpractice” (Charkravarthi, 2016). However, as reproduction practices with ART demonstrate a high level of complexities and ethical controversies reflected in those ongoing amendment efforts of bioethics laws (e.g. the personhood debate), conflicting judicial decisions, cross-border surrogacy, and the commodification tendency of body parts, the rationalist economic approach increasingly falls short of providing adequate explanations and solutions while addressing the questions of safety and equity of treatments, embryonic personhood, and commercialization of childbirth and family formation (Baylis, 2014; Hudson et al., 2011, here cited in Charkravarthi, 2016). For instance, this approach cannot convincingly explain why women at a local clinic in Gujarat/India have been *active* in the decision-making to participate in surrogacy regardless of recent national efforts to deter trans-border surrogacy practices (Africawala and Kapadia, 2019). Furthermore, the functionalist thinking of this utility-driven discourse might be attentive to the scope of the problem caused by global surrogacy arrangements including welfare, commodification, health risks, and serious rights consequences (Melo Martin, 1998; Bromfield and Rotabi, 2014, p. 124; Reddy and Patel, 2015). However, its moral neutrality, inaction or inability to rigorously address a variety of ethical and legal conundrums resulted from the lack of social consensus and international regulation has made bioliberals easily to become prey of transhumanists' agenda of human enhancement (Palk, 2015, p. 40

and p. 47; Ranisch, 2014, p. 7), thereby running the risk of treating the human being as a malleable biological entity and sinking into the mindless contingencies of the evolutionary process.

Against such a danger of complicity on the part of neo- and bioliberalism whose focus remains to support individuals' desire "to benefit from enhancement technologies for themselves and their offspring" (Ranisch, *ibid.*, p. 4), the new materialist feminisms and empiricisms highlight the global divisions of racialized and gendered reproductive labor increasingly shaped by the mode of bio-economy and – technology (Thompson, 2005). Not only have they uncovered paternalistic intervention and serious rights consequences vis-à-vis unprotected patients and surrogates. They are also concerned with stratified reproduction, non-normative and stigmatized fertility and childbearing (Sharp, 1998; Rapp, 2001; Oaks, 2002; Morgan, 2011; Johnson and Simon, 2012; Baylis, 2014). In particular, early feminist scholars like Robyn Rowland warn against the optimistic view that ART automatically further the feminist cause.¹¹ Hence, critical material feminism calls for an analysis that begins with systemic power, instead with individual choice. The question at stake is not just whether ART could help individual women compete with men in the working place (with the choice of freezing their eggs or the use of an artificial womb). The concern also involves whether technology "would enhance women's lives through women's agenda to make them equal"¹² and "help women as a class in all parts of their lives"¹³ to share responsibilities with men. Furthermore, a materialist framework would facilitate an engagement with epigenetic research by broadening ideas of reproduction (beyond in-utero effects) to relational and political views of gender and sex (Warin and Hammarström, 2018) and by interrogating the cartography of the power relations and their underlying discourse in the reproduction assemblages (e.g. the positioning of the white women and women of color in the reproduction hierarchy in relation to 'the neoliberal trend toward privatization and punitive governance' (Roberts, 2014, p. 319)).

The USAID Programs of Family Planning in Sub-Saharan Africa (SSA)

Against the backdrop of strategic medicalization whose managerial conditions, motivations, and practices exert the greatest force of today's healthcare,¹⁴ the majority of the world's fertile population use some mode of contraception: 64% of in-union or married women of fertile age were using some mode of contraception. However, contraceptive use was particularly low in Africa where only 33% of women are projected to use the products so far.¹⁵ For decades, donor countries have programmed family planning and reproductive health assistance to support Africa. Being the world's largest bilateral donor of family planning assistance, United States Agency for International Development (USAID) works in 24 high-priority countries and the Francophone West Africa region, where the need for family planning is greatest.¹⁶ Its programmes, as upheld in its 2019 overview (p. 2), are guided by "principles of voluntarism, informed choice and the restrictions on abortion that are articulated in legislative and policy requirements and program guidance". USAID claimed to have contributed to enhancing the use of contraceptive use with an increase of 32 percent in the 31 focus countries in the developing world. Following the Guttmacher Institute's estimation, in FY 2019, the U.S. international family planning assistance budget have reached 24.3 million women and couples with contraceptive services and supplies, helping prevent 14,700 maternal deaths and 7.2 million unintended pregnancies (USAID, 2019, p. 1). In particular, USAID considers family planning "as a fundamental element of any long-term, socioeconomic development strategy", and key to the Sustainable Development Goals (SDGs) achievement, notable the goals 3.7 and 5.6.¹⁷ As such, it underlines the relevance of family planning being among the most cost-effective interventions to foster human development which helps not only end poverty, but ensure healthy nutritional outcomes and enhance gender equality (Starbird et al., 2016, p. 3-4).

Meanwhile, the US government's ideology-driven policy requirement has strongly limited the scope of USAID's action. As noted by Starrs (2017, p. 485), the global gag rule (also known as the Mexico City policy) imposed by conservative republican administrations has caused serious disruptions to US overseas family planning efforts. Under the Trump administration, the anti-abortion policy applies not only reproductive health. Its scope has been also extended to global health assistance exerted by *all* departments and agencies. Thus, the current gag rule represents a wider attack on global health aid writ large, particularly for those foreign NGOs who receive US funding to work on a broad range of health

programmes in SSA (Starrs, 2017, *ibid.*). For the International Planned Parenthood Federation (IPPF) and Reproductive Health Uganda (RHU) as an affiliation to the IPPF, the global gag rule undermines people's human rights by restricting their choices and forces NGOs to end part of their activities in providing sexual and reproductive health services in the poorest and hardest to reach communities. They warn this cut will have a negative effect particularly on the most vulnerable groups who have been benefitting from family planning service: teenage girls.¹⁸

From the perspective of the economic development discourse, several studies have highlighted how the USAID's conditionality-setting policy between life protection, ideology-driven policy, and NGOs engagements proves to be inadequate. The USAID's policy, according to these studies, falls short of considering the issues of attitudinal resistance, limited access as well as externality costs including "gender differences in fertility preferences combined with imbalance in household decision-making".¹⁹ Little evidence shows that the global gag rule has ever been effective in reducing abortion. Instead, a study found that, during the gag rule years, both fertility and abortion rates were higher than during the non-gag rule years in Ghana's rural and poor populations (Jones, 2015, cited in Starrs, 2017, p. 485). This was due to the declines in the availability of contraceptive services for women, as many foreign NGOs refused to let the US government muzzle their abortion advocacy efforts and were forced to reduce staff and services. Further studies unravel attitudinal resistance remaining a barrier, as strong demand for children exists in many African households due to high child mortality and insecure legal rights for women. Even though access to contraceptives has been improving, it is still limited particularly in western Africa (Scribner, 1995; Cleland, et al., 2011; Canning, et al., 2015).

Inasmuch this economic development lens has detected different factors in shaping the USAID's family planning programmes and pointed out their drawbacks, it has been mostly guided by the modernity-driven rationale, often coupled with a nationalist inspiration, which falls short of providing in-depth insights into the multi-faceted reproduction matter in SSA. An intervention of the new materialist feminisms and empiricisms might well help address the shortcomings of the economic development lens through interrogating power dynamics, medical traditions, privatization tendency of the health sector, structural inequality, attitudinal formation, peoples' relative access to and use of wealth and resources at different levels. As such, it illuminates the power relationships, ethnicities, ages, abilities, and the interconnectedness of social, cultural, and commercial determinants of health in shaping the reproduction matter in SSA (Sai and Newman, 1989; Inhorn, 1994; Turshen, 1999; Herten-Crabb and Davies, 2020). For instance, Grimes (1998, p. 375ff) pinpoints that the USAID's policy is "a narrowly focused policy, based on a simplistic definition and analysis of population growth in the less developed world" which is provided by professional demographers, research centers and foundations who have been under ideological influences. As the framing of the population debate has been problematic which has led to a false problem-setting, the ensuing policies have been driven "as much by self-interest on the part of the developed world, as by a genuine concern for alleviating poverty in the less developed South" (Grimes, *ibid.*).

In particular, several materialism feminist and empirical studies with country-specific focus have grappled with the issue of the disappearance of public health in the form of state services and the growth of a private market in health care which has served urban elite and enhanced the commodification and pharmaceuticalization tendency (Turshen, 1999; Biehl, 2007). Indeed, an unexpected alliance of activists, policy makers, and corporate actors with pharmaceutical innovation has facilitated the provision of free care and maternal care health (MCH) services (e.g. Brazil and South Africa). However, the emergence of a pharmaceutically-centered model of public health has done little favor to the local service providers, whose efforts to realize treatment involve a constant negotiation in light of global drug market, thereby exposing the inadequacies of reigning paradigms and the deficiencies of national and local infrastructures in forging novel state-civil society relations (Biehl, 2007, p. 1083-1084; Schneider and Gilson, 1999). Furthermore, a feminist response to several collected stories concerning the theme of fertility in post-colonial southern African nations in the late twentieth century reveals "the shifting relationship between corporeal embodiment and political agency", whose approach with the concept of „transcorporeality“ reflects the inspiration of new materialist theories by creating "spaces for complex,

ambivalent perspectives on women's agency to emerge", in which the long history of environmental health and reproductive rights in post-colonial contexts has become even complicated.²⁰

The World Bank's Family Planning Support in SSA

For decades, the World Bank (WB) has been a significant multilateral donor and adviser of population assistance to Africa. Its loan to the region began in 1974. By the middle of 1992, the WB has approved almost \$290 million in loan which represented 18.5 percent of total population lending (World Bank, 1993, cited in National Research Council, 1993, p. 156). The majority of these funds supported combined population, health, and nutrition projects which viewed family planning being best introduced through health efforts. Since the mid-1990s, the WB has incorporated development and anti-poverty programs into its lending policy through adopting a comparative and multi-sectoral approach. In its various reports and working papers, the World Bank identifies synergies between family planning and development issues and assesses government policies in SSA in four areas that would lower fertility and raise contraceptive use, namely, girl schooling, child health, women's legal status, and family planning services (World Bank 1992; Scribner, 1995; Cleland et al. 2006; Robinson et al. 2007). It also upholds the importance to address a variety of conflicting health-care priorities in Africa which involve ethical debates and have a moral dimension "with the health and welfare of individuals and families at stake" (Sai and Newman, 1989: 4). Particularly, it warns continuing social and economic inequality in Africa as informality persists remaining the major part of total employment (at around 75 percent) from 2000 to 2016 notwithstanding economic growth or the changing nature of work (the World Bank, 2019, p. 7-8). Hence, for the WB, tackling informality, limited access to health services due to socioeconomic inequality, and the absence of social protection continue to be the most pressing concerns for emerging economies in SSA.²¹

As viewed from the economic and development prism, the World Bank's intervention has proved to be an important impetus in promoting changes in population policy in many countries of the region (e.g. changes in the choice of contraceptive method by family planning acceptors). Empirical studies examining family planning efforts find that socioeconomic setting and program efforts are strongly associated with the availability and accessibility of family planning which again influence the level of contraceptive prevalence rates (CPR). As observed by Sharan et al. (2009, p. 3-4), significant progress was apparent in the 1990s that saw high levels of CPR and the ensuing onset of fertility decline not only in Southern Africa (e.g. Namibia, Zimbabwe, Kenya, and Malawi) but also in East Africa (notably in Uganda, Rwanda, Tanzania, and Zambia). Nonetheless, overall progress in the region remains modest: total fertility rates stagnated in the first decade of the 21st century, especially in Zambia, Kenya, Ghana, and Cameroon. There also existed a widening gap between actual and wanted fertility after 2000 (in Uganda and Rwanda), which was due to the obfuscation of the family planning program and probably a shift in desired family size (Lancet, 2006, p. 1824; Sharan et al., 2009, p. 11). These evidence-based studies not just provide a useful history of intertwined factors in shaping donors' and governments' family planning efforts in SSA. They also point out the challenges the WB faces, namely, the limits of its policies to address those unmet needs and the stagnating or declining use of contraceptives in several sub-regions (notably in western Africa, see Cleland et al., 2011). Still, their indicator-based analysis might fall short of providing a critical view by explaining why the family planning community as part of reproductive assemblages becomes under-funded and how inappropriate rent-seeking service suppliers have hindered family planning services to reach the informal sector and poor population in SSA.

The materialist feminism perspective invites us to trace the drawbacks found in the rigid economic rationale while analyzing family planning and reproduction issues in SSA. Murphy (2012), for instance, detects the uneasy links between economic logics, new forms of racialized governance, U.S. imperialism, family planning, and the proliferation of feminist health projects which have followed complex and discomfiting itineraries. She specifically warns the ambivalence of alternative feminist practices aimed at empowering women. Though the practices and ideologies of alternative health projects have found their way into WB guidelines, state policies, and commodified research, they were also integral to late-twentieth-century biopolitics. Similarly, Grown et al. (2016, p. 313ff) observe missed opportunities for

multi-dimensional action for support for family planning and reproductive health care due to the sector-specific focus and “existence of development programme ‘silos’”. To date, support for family planning and reproductive health care constitute a very small share of total aid that is gender-focused in the health sector (Hsu et al., 2012, cited in Grown et al., 2016, *ibid.*). An analysis of the OECD-data finds that the sectoral allocation of aid (both in health and in education) has been effective in reducing maternal mortality and the female–male gap in youth literacy. Such findings have reinforced other research on aid in these two sectors (Riddell, 2012, cited in Grown et al., 2016: *ibid.*). In this regard, donors are required to rethink the logics of their engagement that would clearly prioritize health programs linking to economic interventions, instead of commonly referring to increasing women’s economic status “as a pathway to improving reproductive health outcomes” (Grown, et al., 2016, *ibid.*).

Furthermore, a close look at donors’ past funded projects reveals that only half of those projects succeeded. Among the failed projects, for example, fight against Malaria across Africa has faltered whose infection rate had risen 12 percent by 2004. The reasons for such failure often lie in the huge discrepancy between donors’ pledge and action as well as the contingency of some programs “subject to political considerations, such as what kinds of insecticides to use, whether to buy cheap generic drugs or how much poor people should pay for mosquito nets”.²² Against the backdrop of considering the use of contraceptives as a criteria of measuring the progress of global family planning efforts, a feminist technology assessment of menstrual-suppressing birth control pills even helps uncover a cross-cultural essentialist consensus (e.g. in the US and in Zambia, see Aengst and Layne, 2014, p. 179-180). This consensus involves a warning against the danger of the new technologies in “doing away with women’s normal hormonal menstrual cycle”, which shapes women’s own knowledge of how their body parts work and thus represents womanhood. Being cognizant of how both the notions of ‘normal/abnormal’ are culturally shaped, such a critical assessment is particularly oriented against the expansion of drug regimes in helping women comfortably to fit the demands of a patriarchally shaped world.

In sum, the comparative reading of the story-telling in three cases unambiguously shows the potential of new materialist feminisms and empiricisms that challenges the normalization of biopolitics and opens new spaces and resources while addressing the multifaceted reproduction matter. It also urges us to rethink the space of “the political” found in the reproduction politics which is intertwined in a variety of ethical tensions and policy paradoxes and has suffered from a high level of health inequity. In the next section, given the promises new materialist feminisms and empiricisms offer, we propose to re-frame an ontological and epistemological space of “the political” which is relational and processual and can provide a new orientation while addressing the reproduction matter at transnational level.

GOVERNANCE OF BIOETHICS IN TRANSNATIONAL SPACE: CHANCES AND LIMITS

Reproduction constitutes one of the important political issues in the global governance architecture reflected in the dynamics of domestic politics and international cooperation between high-income, low- and middle-income countries. The comparative reading of the reproduction practices shown above reveals how the type of global governance has gradually moved from a state-centered management of structural allocation mechanisms to transnational governance, in which state and non-state actors (including NGOs, private corporations and foundations, and local groups and individuals) interact on different scales in a rhizomatic reality of reproduction assemblages. Even though „governance“ as a key concept has been re-articulated with an emphasis on pushing forward transformative agendas,²³ the current frame remains often trapped in a reified way of thinking, leading to inappropriate problem-solving setting and leaving many ethical controversies and policy problems unresolved. Hence, re-framing an ontological and epistemological space of “the political” which is derived from a paradigm of inter-relational humanity (i.e. respect, recognition of the uniqueness of and responsibility towards “the matter/the unborn”) may well constitute a first step to explore new concepts and tools for constructing a robust ethical basis. This endeavor of reframing can be processed in three consecutive steps: Connecting of bioethical thinking with aesthetics which is more sensitive to life’s creative evolution (Hynes, 2013; Zylinska, 2014); disclosing

“natality” as an event and its link to politics through the revision of “the political” (Arendt’s *The Human Condition (HC)*, 1998), and establishing bioethics as part of governance practices (Montgomery, 2016).

First, to connect bioethical thinking with aesthetics, new materialist and empiricist thinking has problematized the analysis of “life” bound to the rigid scientific paradigm. It invites to take seriously the ecology of human and nonhuman bodies and the material world in general. This thinking thereby facilitates the opening to the more ethico-aesthetic potentials of what we call “life”. As such, bioethical thinking might become an experiment field more sensitive to life’s creative evolution which involves a form of *life’s unfolding* and concerns the very nature of existence in time, of duration, emergence, reproduction, and being alive (Thompson, 2005; Hynes, 2013; Zylinska, 2014). Like an ontological choreography, the alliance of bioethics and bioart not just undermines the metaphysical understanding of life. It also challenges the traditional humanist value-based ethics, whereby “human life” should be protected at all cost. Meanwhile, the posing of this challenge does not automatically mean a devaluation of human value-based ethics. Instead, it opens venues for enacting a different ethics of life, having recognition respect for persons (Darwall, 1977) and various life forms, taking responsibility for them (i.e. humans, animals, organs, cells, bacteria, and virus), and enhancing self-respect. As emphasized by Zylinska (2014), “the protection of life’s unfolding constitutes the first condition of this ethics” which might offer new possibilities in addressing a variety of ethical tensions. For instance, the debates surrounding “personhood” can be approached in a more contextualized and sensible manner focusing on the being of a person and its materialities; the concept of human dignity can be used as an avenue for exploring differing philosophical approaches that promote transparency, and encourage dialogue while tackling highly controversial issues such as stem cell and ART debates (Beckwith, 2001; Caulfield and Chapman, 2005).

As a second step, a novel ontological dimension is needed to redefine “the political” for organizing democratic plurality and elaborating an ethics of care. Of good use is a view through Hannah Arendt’s disclosure of “natality” as an event between agents and Emmanuel Levinas’ responsibility ethics. To be sure, the event of natality is *less* a saving act of human existence from determinism than a reference to the way that the very appearance of human beings in a world interrupts the cyclic time of nature (*zoe*), and the passing of linear (historical and biographical) time (*bios*) (Arendt, 1998: 96-98ff). For Arendt, both *zoe* and *bios* as aspects of life determine the path one takes. It should be paved by reflective thinking and the act of judgement with the aim to address the paradox humans face due to a reduction of human agency and political freedom taking place in the midst of increasing human powers through technological and humanistic inquiry. In this way, the event of natality through speech and public action reveals “the fundamental *unique distinctness of each person and the plurality of human existence*” (Diprose and Ziarek, 2018, p. 41).

This model of inter-relationality in upholding the relevance of the creativity and imagination of human existence can be reinforced by Levinas’ responsibility ethics whose major concern with the Other has priority over any act. In this Levinasian phenomenological project proclaiming *Being as an Otherness*, what is at stake is the issue of alterity (i.e. found in time, existence, the other person, language, and God). As noted by John Lechte (1994, p. 117ff), Levinas uses “transcendence in the sense of rupture, and opening up to the Other, as opposed to the Western tradition’s reduction of the Other to the Same in its drive to objectify and universalise”. Even though there is a constant danger of presenting this Other of Western thought being inescapably another version of the Same, Levinas’ search for a way of presenting the irreducible Other in philosophy can already be found in his lectures (*Time and the Other* 1948/1990) that point out femininity as the modality of alterity he was looking for. In other words, though Levinas never uses the concept “care” in elaborating his project, the ethics of care and Levinas’ efforts of rendering the Other intelligible have a lot in common. They can be illustrated either in the mother-child relationship or in the mother earth-humans relationship whose paradigm unambiguously reveals the vulnerability and dependency of the self/human being. Similar to Arendt’s disclosure of “natality”, both ethics cherish the particularity of every person and every situation and underline the importance of a responsive attitude towards the Other and the world. Inspired by this frame of reasoning, ARTs and transnational surrogacy can be approached through a fresh perspective: as the increased use of ARTs, the

tendency of commodification of body parts and surrogacy imply a decrease in humans' control over their reproduction, it is necessary to look not just to broad social policy, but also "to the details of relationships to delineate the social attitudes and patterns that are at risk of being undermined" (Sherwin, 1989, here cited in Krause, 2017, p. 91). In considering the relationships of all parties involved, care ethicists such as Stephanie Collins underline that these inherent value relationships ought to be treated as moral paradigms; valued, preserved, or promoted; and "acknowledged as giving rise to weighty duties" (Collins, 2015, p. 47, here cited in Krause, *ibid.*). Derived from such moral paradigms, clinical ethics concerning ART and living organ donation can put emphasis upon "strengthening the tacit pact between doctors and patients, rather than putting doctors in charge of enforcing societal values" (Berthiau, 2013, p. 105).

In a third and last step in this endeavor of designing an emancipatory ethco-onto-epistemological frame, bioethics can be considered as a governance practice with distinctive institution and structures (Montgomery, 2016), which have both country-specific and transnational nature. The UNESCO *Universal Declaration on Bioethics*, the work of national ethics/bioethics committees as well as transnational efforts to collaborate research projects in enhancing North-South health equity (e.g. Deutscher Ethikrat, 2018; Bisht, et al., 2012) provide vivid examples for such practices, in which various legitimating narratives evolve. They include statements against scandal, the need to restrain irresponsible science, the accommodation of pluralist voices as well as the resistance to the neutrality position bioethics often tends to do. For instance, the 2016 global summit of national ethics/bioethics committees has grappled with global health issues and illustrated the interconnected nature of public health decisions with ethical considerations and questions of justice at a global scale. A further example can be found in those socio-scientific research works that provide not just reflections upon dominant modes of thinking about public health and infectious disease governance (e.g. the hygiene and antimicrobial politics in Hong Kong during the 2003 SARS crisis and the 2020 global COVID-19 crisis). They also urge us to rethink socioeconomic relations and policy practices that exacerbate human-animal-microbial interactions, thereby triggering the outbreak of the pandemic in an unusual manner (Price-Smith, 2009; Voelkner, 2019, p. 375).

In sum, in taking a plane of possibilities provided by a combined materialist feminist and philosophical perspective, we see that reproduction can be approached in a widened horizon with novel concepts and tools available for in-depth explanation and application. This plane proves to be attractive in its readiness to accommodate diverse conflicting normative requirements and to set rules in transnationally shared health governance among different stakeholders.

DISCUSSIONS AND FUTURE RESEARCH

Since the outbreak of the Covid-19 pandemic in spring 2020, public debates appear to be increasingly driven toward the direction trapped in the assumed dilemma between guaranteeing public health through restrictive measures, on the one hand, and ensuring economic security, on the other. Yet this juxtaposition is misleading by a reification of terms, of "health" versus "economy". In countering such a misleading narrative, a joint study by economists and life scientists using scenario calculation and modelling estimates the effects of containment measures against the coronavirus upon economic development (Dorn et al. 2020). The study shows that the interest of society in the protection of public health is not principally opposed to the economic interests of the broad population. For example, a strategy without political restraints for society and apparently with less economic costs would soon lead to serious deterioration of public health and would thus, in any society not willing to accept such loss, trigger a series of harder restraints. Hence, a nuanced balancing policy response to pursue the common interests of public health *and* economic security is required.

In light of the results this paper shows, future research should consider how the economic rationale can avoid such binary misleading thinking, be re-defined, and incorporated into the emancipatory reasoning the paper has proposed. Some hints lie already in the suggestion to place reproductive technologies "within a temperate, affordable, sustainable and just health care system" (Ryan, 2003). Another hint can be found in an ethnographical field work that unravels the contradiction of the

entrepreneurialism discourse pledged by donors in portraying female informal workers as entrepreneurs in low-income countries (e.g. in India, see Boeri, 2018).

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ENDNOTES

1. See Galloway, K. (2019). *Assisted Reproductive Technologies (ART) and Human Rights*, Available at <http://rightnow.org.au/opinion-3/assisted-reproductive-technologies-and-human-rights/> (accessed on Sept. 15, 2019).
2. See Daly, 1990 (1978), here cited in an interview with Susan Leigh Star by Bauchspies and de la Bellacasa, 2009: 334.
3. See Olivier, B. (2015). *What is “rhizome” in Deleuze and Guattari’s thinking?* Available at <https://thoughtleader.co.za/bertolivier/2015/06/15/what-is-a-rhizome-in-deleuze-and-guattaris-thinking/> (accessed on 28. Feb. 2020).
4. Besides many start-ups companies that develop new products such as a birth control creme named Amphora, universities and research institutes work also very hard on innovative contraceptives partly on hormonal and partly on alternative basis. For instance, Cardiff University develops a patch that uses tiny needles to release hormones over six months. A laboratory at Northwestern university attempts to control ovulation from the outset. See Berndt, C., Dostert, E. and Werner, K. (2019). Pillenknick, *Süddeutsche Zeitung* (SZ), Dec. 24-26, p. 17.
5. See Berthiau, 2013; Tellerreport. (2019). *The debate: France at the time of PMA for all*, Sept. 10, available at https://www.tellerreport.com/news/2019-09-10---the-debate---bioethics-law--france-at-the-time-of-the-pma-for-all-r1lqi_DrIr.html (accessed on Jan. 25, 2020).
6. See Haniman, J. (2019). Mutterschaftsmarkt, SZ, Sept. 30, p. 10.
7. See Hof, E. von (2019). Gottes Hohn (God’s mockery), SZ, 2. Aug., p. 8.
8. See Gottbrath, L.-W. (2019). US expansion of global gag rule will ‘punish women’ worldwide, *Aljazeera*, 26 March. Availabe at <https://www.aljazeera.com/news/2019/03/expansion-global-gag-rule-punish-women-worldwide-190326182044232.html> (accessed on 24 Feb. 2020).
9. During a terror attack in Hanau in Germany in February 2020, Tobias R. killed nine persons with migration background, his mother and later himself. As a lone radical rightist, he was reported to have blamed feminism being the reason for the sinking birth rate in Europe. Such an anti-feminist attitude can also be found in other terror attacks (i.e. in Christchurch in New Zealand and in El Paso in the US. See Haaf, M. (2020). “Im Feindinnenland”, SZ, 21. Feb. p. 6.
10. European nations such as Britain, Spain, Portugal, the Netherlands, Ireland, Belgium and Scandinavian countries, have authorized medically assisted procreation for all women. See Agency French Press in Paris (2019). “French MPs approve IVF draft law for single women and lesbians”, Sept. 27, available at <https://www.theguardian.com/world/2019/sep/27/french-mps-approve-ivf-draft-law-single-women-lesbians> (accessed on Jan. 26, 2020).
11. Rowan reminds us that “high-tech procedures are controlled by male-dominated institutions.” Cited in Gershon, L. (2015). *Reproductive Technology, Motherhood, and Feminism*, available at <https://daily.jstor.org/reproductive-technology-motherhood/> (accessed on May 26, 2019).
12. Layne 2010, cited in Gupta, S. (2014). *Is There such a Thing as Feminist Technology?* Available at <http://ignite.globalfundforwomen.org/gallery/there-such-thing-feminist-technology> (accessed on May 26, 2019).
13. Cited in Gershon 2015.
14. See Applbaum, K. (2009). *Pharmaceutical Marketing, Capitalism, and Medicine: A Primer (Part I-III), Somatosphere (Science, Medicine, and Anthropology)*, available at http://somatosphere.net/2009/pharmaceutical-marketing-and-capitalism_28.html/ (accessed on June 28, 2019)

15. The data is based on a 2015 statistic. See Ugalmugale, S. & Swain, R. (2019). *Contraceptives Market Size by Product [Drugs {Oral Contraceptive Pills, Injectable Contraceptives, Topical Contraceptives}, Devices {Condoms (Male, Female), Diaphragms, Contraceptive Sponges, Vaginal Rings, Subdermal Implants, Intra-uterine Devices (Copper, Hormonal)}], By Age (15-19, 20-29, 30-39, 40-49)*, Industry Analysis Report, Regional Outlook, Application Potential, Price Trends, Competitive Market Share & Forecast, 2019 - 2025. Available at <https://www.gminsights.com/industry-analysis/contraceptives-market-report> (accessed on Jan. 2, 2020).
16. Of the 24 priority countries, 23 are also supported with Maternal and Child Health programs designed to maximize opportunities for integration and synergy. See USAID, 2019.
17. Both goals support “universal access to sexual and reproductive health-care services, including for family planning” and “universal access to sexual and reproductive health and reproductive rights,” respectively. See the United Nations, About the Sustainable Development Goals, available at <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (accessed on Feb. 28, 2020).
18. According to the WHO, about 16 million girls aged 15 to 19, and one million girls under the age of 15, give birth every year. Most of them live in low- and middle-income countries. Teenage pregnancy has a larger economic cost to countries “as they lose out on the income an educated young woman would have earned” if she is forced to drop out of school, “spelling a life marked by early marriage and low-skilled jobs”. See Mutiga, M. (2017). How the US ‘global gag rule’ threatens health clinics across Kenya and Uganda, *the Guardian*, Jan. 24, <https://www.theguardian.com/global-development/2017/jan/24/how-the-us-trump-global-gag-rule-threatens-health-clinics-across-kenya-and-uganda> (accessed on Sept. 25, 2019).
19. See Glick, P. & Linnemayr, S. (2016). *The economic rationale for investing in family planning in Sub-Saharan Africa*, May 10, available at <http://blogs.worldbank.org/health/economic-rationale-investing-family-planning-sub-saharan-africa> (accessed on Sept. 18, 2019). See also Canning et al. 2015; Cleland et al. 2011.
20. As noted by Stobie, the stories collected in the book *Opening Spaces: Contemporary African Women’s Writing* (1999) focus on environments as interconnected and organic systems in which human and more-than-human bodies are all enmeshed actors (Alaimo, 2010, p. 2) through the interactions between natural symbolism and the artifice of narrative form. In light of a scene wherein a pregnant woman’s corpse mysteriously gives birth after she is whipped to death, Zimbabwean author Yvonne Vera portrays the authors of the collected stories being “witnesses, in that seemingly impossible birth” of African feminist fiction. Cited in Stobie C. (2017). *The Birth of ‘New’ Materialism? Abortion and Southern African Women’s Writing*. Available at <https://findingafricaseminar.wordpress.com/2017/02/16/the-birth-of-new-materialism-abortion-and-southern-african-womens-writing/> (accessed on Apr. 27, 2020).
21. See Oyatoye, I.F. (2019). *Taking stock: Financing family planning services to reach Ghana’s 2020 Goals*. March 18, <https://blogs.worldbank.org/africacan/taking-stock-financing-family-planning-services-to-reach-ghanas-2020-goals> (accessed on April 26, 2020).
22. See Associated Press. (2007). *Examples of Failed Aid-Funded Projects in Africa. Oil Pipeline, Fishing Processing Plant are few of the unsuccessful ones*. http://www.nbcnews.com/id/22380448/ns/world_news-africa/t/examples-failed-aid-funded-projects-africa/#.XQyvcC35x-U (accessed on June 15, 2019).
23. “Governance” as a concept has experienced several dynamic conceptual evolutions. It can be either viewed as a problem-solving approach to address the shortfalls of public and private institutions to function efficiently or as a sum of collective means and action in providing transformative agendas while addressing the needs of society as a whole. Dodgson et al. (2002, p. 6) define it broadly as the actions and means adopted by a society to promote collective action and deliver collective solutions in pursuit of common goals.”

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