Introduction

This paper aims to examine the slippery slope argument and whether it is useful to analyze ethical problems or not, especially for matters for which it was originally used in bioethics such as euthanasia, preimplantation genetic diagnosis (PGD) and genetic engineering. This paper limits the scope to PGD. In examining the slippery slope argument with PGD, it considers the following: What is the slippery slope argument? How does it apply to the case of PGD? What is the limitation of the slippery slope argument? Finally, this work will suggest two purposes of the slippery slope argument analyzed from the case of PGD.

The slippery slope argument

D. Walton defines the slippery slope argument as “a kind of argument that warns one if one takes a first step, one will find oneself involved in a sticky sequence of consequences from which one will be unable to extricate oneself, and eventually one will wind up speeding faster and faster towards some disastrous outcome”1. According to Walton, the slippery slope argument structurally involves two arguments. First, it is a kind of argument from gradualism which shows that the downward movement occurs by small degrees; second, a negative argument from consequence to warn that some dangerous result that may follow if one accepts the first step2. For this reason, the slippery slope argument will have two directions of movements, forwards and backwards. The first direction by the argument from gradualism demonstrates the slippage toward the bottom that brings about terrible outcomes if one takes the case (the first step)3 from the top. The second direction starts from the bottom by a negative argument from consequence. Since the terrible outcomes at the bottom are undesirable, one will be asked to refuse the bottom and then following cases beyond the bottom gradually until one move backwards toward the top (the first step) to reject it.

In preceding the slippery slope argument, we use a dialectical structure (dialogue form). There are two participants in the dialectical structure. One participant has a “pro” position that is referred to as “the proponent”, and the other a “contra” position that is referred to as “the respondent”. Once the respondent agrees with the proponent about a premise3, the slippery slope argument is possibly starting with the acceptance of the respondent about the premise4, “Such a dialogue is about actions, and therefore the kind of reasoning involved is practical reasoning—it is a problem of how to proceed prudentially in a given set of circumstances where an agent must make a choice based on some explicit or implicit set of goals or priorities”5. Based on presumptions, we assume expected consequences once one takes the first case. However, the following consequences cannot be known in advance or pre-
dicted accurately. For this reason, such slippery slope arguments are always inherently defeasible, or open to reasonable rebuttal. In order to be successful, the arguments have to be just strong enough to shift a burden of proof in a balanced dialogue. The “defeasible” characteristic is presenting the nature of the slippery slope argument which may turn out to be false. For Walton, the key thing about the slippery slope arguments is that the strength of commitment required to make such an argument reasonable should be judged by the context of dialogue rather than by some abstract and context-free standard of deductive or inductive correctness. For this reason, we might start the slippery slope argument about choosing an object of the human act such as PGD and euthanasia with the perspective of a social and cultural value system by which one justifies the object in demonstrating that one gradually involves in the series of the slippery slope argument toward undesirable outcomes. After succeeding in developing the slippery slope argument, we warn that the object of the human act from the first step must be rejected.

The slippery slope, however, does not only focus on consequences but also on some false logical and moral reasoning in the process of a course of action which one is contemplating. According to P. Ramsey, the falsity of moral reasoning is already in the first step on the slope, and the sequences have in them the same essential wrong; they do not become corrupt cumulatively or because of secondary results deemed undesirable or which turned out to have extrinsic evil results. For him, one uses the argument when worrying about the moral acts, moral agency and moral reasoning which put the engine of false principles or flawed ethical analysis behind the slippery slope. For this reason, Ramsey suggests that the moral reasoning behind the wedge needs to be carefully examined because it is not a question of straight forward logical validity.

Unlike Ramsey, F. Schauer insists that the argument, which is against the first step, is structurally different from the slippery slope argument because the former is not about where this first case may lead us, but whether we have already arrived. In Schauer’s perspective, “it is not when we are at the bottom but only when we are at the top of the slope and afraid of sliding to the bottom that we need a slippery slope argument.” In effect, his definition indicates that the slippery slope argument starts with the implicit concession “the proposed resolution of the instant case is not itself troublesome. By focusing on the consequences for future cases, we implicitly concede that this instance is itself innocuous, or perhaps even desirable.” Owing to Ramsey and Schauer, we think two possibilities. The first possibility is that the first case is not permissible, some factors, for example, of a new prospect by scientific and technological progress and a new cultural climate in causing moral decline, may play a role to make the first step look innocuous like the case of in vitro fertilization (IVF). The second is the first case is itself innocuous like the case of the heap argument. We necessarily distinguish between these two possibilities; because applying the slippery slope argument to bioethical issues in reference to human life brings about considerably different consequences from a simple sorites argument like the heap argument. Thus, with reference to bioethical problems, we consider in this paper only the first possibility that some facts might make the first step look innocuous.

PGD and the slippery slope argument

PGD does not promote human life, but establishes a threshold for human existence. Thus, PGD seems to be not permissible from the ethical point of view as a medical practice that must be promoting of life. Nevertheless, many think that PGD is permissible for therapeutic use as long as the genetic condition of the human embryo is serious enough. Then, the extent of application has been expanded. From the acceptance of PGD and its expanding use, we raise a question as follows: “what makes people think it is innocuous at the first step, and thus acceptable, and how does it lead to the next step?” According to Schauer, “when a slippery slope argument is
made, there is necessarily some extant state of affairs" which he calls the "state of rest". For example, when PGD is accepted as a medical practice, the scope of the end of medicine is necessarily expanded. The classical end of medicine involves a definition of health for the patient's good that aims at the promotion of life, but the expansion of the end of medicine to justify PGD as a medical practice needs to include a definition of preventative medicine for negative eugenics that aim at eliminating the possibility of life unless the life is healthy. Both aim at a good; for the former's case the good is considered on behalf of the patient and the latter on behalf of the third party like the mother (and parents), family and society in eliminating the possibility of unhealthy life. In the latter case, the meaning of the good is distracted from the meaning of the patient's good.

For this reason, the linguistic boundary around the definition of preventative medicine for eliminating the possibility of life for the third party seems to embrace the danger step. There is a gap between the definition of health to promote life and the definition of preventative medicine to eliminate the possibility of life. If we accept PGD as a medical practice, the acceptance indicates that the end of medicine must include the definition of preventative medicine to eliminate the possibility of life for the third party's interests. Otherwise, PGD would not be accepted as a medical practice. Thus, there would be some extant state of affairs to expand the range of the end of medicine from the definition of health to the promotion of life to the definition of preventative medicine for the elimination of the possibility of life. As described, if the end of medicine includes the definition of preventative medicine for eliminating the possibility of life to accept PGD as a medical practice for others' benefits, the linguistic boundary between the definition of health to promote life and the definition of preventative medicine to eliminate the possibility of life has been softened. If so, the further movement in the use of PGD is speeding toward the dangerous outcome.

In this light, the starting point of the slippery slope argument is how people justify PGD as a medical practice from the perspective of the classical end of medicine. Upon this matter, the core issue is how the justification of embryo selection for PGD is made. Then, the following concern is the expanded use of PGD focused on embryo selection. The final is the bottom that one defines as undesirable like liberal eugenics or designer babies.

**Force of consistency to move forwards**

One may raise a question how the slippery slope argument builds up logical validity if it proceeds without ethical correctness. It is an interesting question because logic seems to be relevance to correctness. As mentioned already, the reasoning of logical validity to reach a conclusion from a premise in the slippery slope argument is not deductively valid but presumptively valid in a context of dialogue.

Once the proponent has put a premise forward in an argumentative discussion, the respondent has a choice of accepting it or not. For example, in the case of the first report on PGD there is a premise as follows: “If the fetus is affected by a defect or is male, abortion can be offered. Diagnosis of genetic defects in preimplantation embryos would allow those unaffected to be identified and transferred to the uterus.” In this case, the premise implies that as prenatal diagnosis (PND) can be offered unless an unborn child is healthy, PGD is useful as an alternative to PND to select healthy embryos before transferring. The premise emphasizes the goal to have a healthy child, thus acceptable instead of PND.

In the above example, if one accepts the premise as a provisional commitment, now
one enters into the slippery slope argument of PGD as the respondent. It is the first step in the slippery slope argument. Each step (case) has a premise and a conclusion. In theory, the conclusion of the last sub-argument becomes one premise of the next sub-argument. It means that the first conclusion for PGD of X-linked genetic disease as an alternative to PND now becomes a premise for the next application. Then when the application reaches its conclusion, it becomes a premise for the next as follows. [link1]: if PGD is an alternative to PND, it is permissible as a medical practice. [link2]: if PGD is permissible as an alternative to PND, all kinds of genetic diagnosis that PND has performed are also permissible for PGD. [link3]: if PGD is permissible for the scope of PND, PGD needs to become a routine in IVF cycles for Aneuploidy screening (PGD-AS) to increase the success rates of delivering healthy children. [link4]: if the course of performance must consider the accuracy and success rates, the technical development is also inevitable.

In these examples, one case and the next have a logical connection. This logical connection constitutes the strength of consistency in the slippery slope argument. The logical connection has a force to move the forward movement (I call it the force “force of consistency” in the slippery slope argument). However, if any point is weak in its logical connection, the slippery slope argument is subject to being overturned. In addition, the slippery slope argument requires empirical evidence to support the argumentation in each case.

Sliding down toward liberal eugenics and the outcome

With the permission of eugenic abortion, the acceptance of PGD presupposes that embryo selection is already justified by in vitro fertilization. Since the first step has taken, the use of PGD has been expanded as follows. PGD was originally applied for a fetal genetic defect and then indications for severe disease late onset such as Huntington’s disease. It has expanded to late onset susceptibility conditions such as breast and ovarian cancer to eliminate a genetic mutation. It is also used to provide a matched tissue donation (Human Leukocyte-associated Antigens PGD typing) to an existing sibling. Nowadays, PGD additionally performs for non-medical reasons like non-medical sex selection and non-medical desired traits in clinical practice.

Of all matters with regard to PGD, the fundamental ethical concern is the eugenic mentality that supports the practice and the expanding use. In this respect, many are already involved in the slippery slope heading towards liberal eugenics in the use of PGD; because eugenic abortion has been allowed in some countries, the eugenic mentality becomes widespread in popularity at both individual and social levels. With the eugenic mentality, many proponents support parental autonomy. This support plays a pivotal role on decision-making for the “seriousness” of medical conditions. Then, the acceptability of a child’s quality of life expands to non-medical indications such as intelligence and height. In addition, parental moral obligation is introduced to support embryo selection for non-medical indications to choose better children. Owing to the expanding use, the rationale of negative eugenic mentality leads to positive eugenics by genetic intervention toward the final stage (the bottom of the slippery slope argument). It means that the direction of slippage enters “the futuristic realm of ‘designer babies’.”

The backward movement

In the final stage, the direction of slippage and the outcomes seem to be against the initial purpose of the respondent toward PGD for therapeutic use within his/her understanding of the social and cultural value systems. Thus, the respondent is committed to rejecting the final stage. In the backward movement, the respondent begins with the rejection of designer babies, and then sub-premises with conclusions by force of consistency; after that, finally, he/she refuses the first premise in which one accepts PGD as a medical practice. However, it does not mean
that the respondent rejects the ethical foundation, which seems to have some false moral reasoning, behind the slope of PGD. This fact indicates some limitation of the slippery slope argument.

**Ethical Evaluation**

In the slippery slope argument, the initial stage implies the understanding of social and cultural values on embryo selection to conclude that PGD is reasonable for the therapeutic use. Interestingly, the meaning of “reasonable” has some validity only in a particular contextual understanding. It is not easy to grasp its implication precisely. It reflects the nature of the slippery slope argument in which one slides down the slope. The value of human life is not ambiguous. If one decides on an action that determines the value of human life with ambiguity based on some widespread societal ideology, that decision cannot guarantee the inviolability of human life. In the slippery slope argument of PGD, however, if the procedure is practical to carry out the intended goal to have a healthy baby in the widespread societal value systems, the case is accepted as reasonable although the procedure harms the human subject (but the violation is hidden because the intervention is defined for therapeutic purpose). From this fact, even though the first decision seems to be reasonable, in effect it may not be from the ethical point of view. Nonetheless, the slippery slope argument emphasizes that although the first step seems to be acceptable, it will bring up a dangerous outcome that is the reason to refuse the first case. While it is a considerable reason to reject the first case because of causing dangerous outcomes, it is insufficient not to take the first step of PGD. As long as one regards PGD as a medical act that is neutral or innocuous, the slippery slope argument is unstoppable because there is no reason one rejects PGD.

**Of all matters with regard to PGD, the fundamental ethical concern is the eugenic mentality that supports the practice and the expanding use**

With the consideration about the limitation of the slippery slope argument, I suggest that we analyze the slippery slope argument for two purposes. The first is similar to the slippery slope argument which is to warn of the dangerous outcomes if one permits the first step. The second is to examine the ethical foundation of the acceptance of the first step from the ethical point of view. By examining the foundation one reflects his/her choice on whether the first step is truly reasonable (and morally good) or not. To carry out the second purpose, we necessarily evaluate the object of the human act one chooses at the first step.

Under the two purposes, we first illustrate characteristics of the slippage since the first step of PGD is taken in analyzing from the perspective of the slippery slope argument, and second examines the ethical foundation, which justifies PGD, from the perspectives of ethical principles such as the nature of medicine, the subject of medicine and the human corporeality. After that, we reject PGD with two reasons as follows. The first is that the practice of PGD cannot be innocuous. It has implications of eugenic mentality that are distinct from the nature of medicine. Thus, it can damage the medical act and violate moral postulates that we must respect in order to guarantee the fundamental right to life on which every other right (and good) is built. Some false moral reasoning is already present from the initial acceptance of the respondent toward PGD for not recognizing the value of the human corporeality from conception, and the subsequent steps have the same underlying error. Once the goal of PGD as a medical practice has been removed from the nature of medicine due to an improper definition of the main subject of the procedure; the outcome results in an erroneous attitude toward human life. This does not only affect the right to life of the human embryo, but in the long run anyone who does not meet certain social and
cultural norms will not be regarded as human.

The second reason to reject PGD is based on the fact that the stickiness of the slippage in PGD will end up in liberal eugenics once the respondent takes a move. The respondent defines the consequences from liberal eugenics as undesirable in current social and cultural value systems by which the respondent takes the first step. Since the slippery slope argument has started with the position of the respondent who is in favor of PGD, it demonstrates that ethical justification of PGD within the prevailing social and cultural norms has some false moral understanding of a good or happy life; that is the engine of flawed ethical analysis behind the slippery slope. Once one takes the first step with the false understanding of the good, it leads to a series of missteps by means of logical consistency. Since the underlying theory to support the first premise is wrong, the subsequent justifications will make the same mistakes. However, on this continuum, it is difficult to determine whether the direction of slippage is wrong or right because of the force of consistency that leads to moral degeneration against the truth of the human person and the truth of the ultimate good. In this case, only when one postulates that the first step is wrong; he/she can fix it. Likewise, when the respondent clearly criticizes the flawed reasoning to accept PGD in the first step, with the recognition of the value of the human corporeality and dignity, he/she can extricate him/herself from the series of the slippery slope. Otherwise, the slippery slope would be unstoppable.

Conclusion

This paper has examined the slippery slope argument and whether it is useful or not to apply to bioethical issues. In my view, the slippery slope argument is useful to reflect a choice about an object of the human act such as PGD, euthanasia, genetic engineering in a given social and cultural value system. However, it is insufficient to evaluate ethical problems of the object of the human act itself like PGD and one’s attitude toward the object. Thus, I suggest that we analyze the slippery slope argument for two purposes first to warn of the dangerous outcomes if one permits the first step and second to examine the foundation and moral reasoning to justify the object like PGD from the ethical point of view to judge whether the first step to accept the object is truly reasonable or not. Owing to these double purposes of the slippery slope argument, one will see why certain immoral objects of the human act bring about the slippery slope argument and at the same why we must reject such objects.

NOTE

2 Ibid., 212, 222-225.
3 In this paper, the word “step” indicates one individual case. Thus, the words, “step” and “case”, are interchangeable in this thesis. By contrast, I distinguish the word “step” (or case) from the term “stage”. One “stage” contains several steps.
5 Ibid., 14.
6 This characteristic is called “defeasible,” meaning that the conclusion from the premise is only a hypothesis that is subject to being overturned by future evidence or information in the case that suggests otherwise. Cf. D.N. WALTON, “Abductive, presumptive and plausible arguments,” Informal Logic, 21/2 (2001), 141-169 at 145.
7 D. WALTON, Slippery Slope Arguments… 14.
8 Ibid., 15.
11 Ibid., 369.
12 JOHN PAUL II, Encyclical Evangelium Vitae: The Value and Inviolability of Human Life, Veritas Press, Dublin 1995, n. 4
13 “If you take one grain away from a heap, it makes no significant difference—you still have a heap. Each time you repeat this step, it makes no difference, because one grain is too small to make a difference bet-
ween something being a heap or not. But repeated long enough, the conclusion of this reasoning will become absurd, for it will become obvious that what is left can no longer be described as a heap. D Walton, *Slippery Slope Arguments*, 37-38.


15 E. Schauer, “Slippery Slopes,” ... 370.

16 Ibid., 370-371. He calls the beginning of the slippery slope “the state of rest” and the slippery slope itself “the state of affairs”.

17 One might argue that PGD is for the child’s good. However, any good is built upon life. Life is prior to any good. Thus, eliminating the possibility of life cannot promote the human being’s good whose life is eliminated.

18 The justification of presumptive reasoning (despite its uncertainty and inconclusive nature) is that it moves a dialogue forward part way to drawing a final conclusion, even in the absence of evidence of proof at a given point. Because of its dependence on the use in the context of dialogue, it is different in nature from either deductive or inductive inference.


20 I demonstrate the course of development in my dissertation. Cf. Ibid., 109-121.

21 This characteristic is called “defeasible,” meaning that the conclusion from the premise is only a hypothesis that is subject to being overturned by future evidence or information in the case that suggests otherwise.

22 Cf. Ibid., 121-215.

23 PGD is a genetic diagnosis aiming at quality control of embryos before transferring into the uterus. Thus, embryo selection is the essential course. The fundamental criterion to allow embryo selection, the status of the human embryo must be defined as not having a right to life. The reasoning for accepting PGD as ethically defensible heavily relies on the perspective of consequentialism and proportionism in defending the use of the human embryo in the 1970s and the 1980s. The use of the human embryo for *in vitro* fertilization is justified as a means for a medical practice. The ethical foundation is problematic but accepted. For example, to achieve the stated goal to have a healthy baby, moral reasoning to use PGD as an alternative to PND from the beginning presupposes that eugenic abortion is permissible and the use of the human embryo within 14 days ethically acceptable. The eugenic abortion had already been performed as permissible, but the justification of the use of the human embryo was controversial at that time. Nonetheless, many authorities’ conclusions (and ethics committees’ statements) justified human embryo research as ethically defensible or ethically acceptable like the conclusions of the Ethics Advisory Board (1979), the Ethics Committee of the American Fertility Society (AFS) (1990) in the US and that of the Warnock Report (1984), the *Human Fertilisation and Embryology Act* (HFEA) (1990) in the UK. Their conclusions are significant to accept PGD because the conclusions (or statements) contribute to devalue the status of the human embryo in the social and cultural value systems. Once the status of the human embryo is violated by authorities, wider steps to use the human embryo become easier than in the past. One of the wider steps is the acceptance of PGD as a medical practice. Once the perspective of the eugenic mentality is supported by acceptance of PGD as a medical practice based on the status of the human embryo, subsequent arguments are also reflective of this eugenic mentality. Cf. Jinil Choi, *The Ethics of Preimplantation Genetic Diagnosis Analyzed from the Perspective of the Slippery Slope Argument*, Doctorate Dissertation, Ateneo Pontificio Regina Apostolorum, Roma, 2013, 76-109, 304. I examine this period under “pre-stage”.

