

# What Ethical Approach is Effective in the Evaluation of Gene Enhancement?

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# Objectives

- to introduce current Japanese policy
- to show there are some difficulties in applying traditional normative ethics to Preimplantation Genetic Enhancement
  - to show that a meta-ethical perspective is needed to evaluate PGE



1. Introduction – Japanese Case
2. Normative ethics
3. Meta ethics
4. Concluding Remarks




# 1. Introduction

~ Japanese Case

# 1. Japanese policy on PGE

- Act on Regulation of Human Cloning Techniques (2000)
- Guideline on assisted reproductive technology treatment producing human fertilized embryos (2010)
- Guidelines for gene therapy clinical research (2015)

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- On gene-editing research in human embryos : Interim Summary  
(Council for Science, Technology and Innovation 2016)
  - They suggest that permissibility of the research should be decided by its purpose.

# Interim Summary

Permissible:

- ① For basic research and
  - A) to elucidate the function of genes at the early stages of the development and differentiation of a human embryo

# Interim Summary

Conditionally permissible :

② for basic research and

B) to develop a new treatment for a hereditary disease

C) to develop a new treatment for a disease(cancer etc.)

※limited to cases when research cannot be done without use of human embryos



# Interim Summary

Impermissible:

③ for basic research but

D) not necessary for the treatment or prevention of disease

In particular, research which aims for human enhancement is socially unacceptable.


# Interim Summary


Impermissible

② For clinical research

- safety risks
- gene pool is a historical heritage


priority should be given to efforts to create a society where everyone can live comfortably

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- Japanese policy consistently has permitted basic research and forbidden clinical research with human embryos.
  - In this “Interim summary”, research which aims for enhancement is prohibited even as basic research. The reasons for the prohibition are vague.

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- There have been many arguments over the ethical permissibility of PGE, and debate seems to be deadlocked.
  - To resolve the situation it could be helpful to examine what kind of ethical approach is effective in the evaluation of PGE.



## 2. Normative Ethics

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- Traditionally, when people engaged with applied-ethics, they applied normative-ethics to actual situations.
  - However, there are some difficulties in such an application to PGE.
  - In what follows, I shall examine (1)deontology and contractualism, (2)utilitarianism, (3)virtue theory

## 2.1 Deontology and contractualism

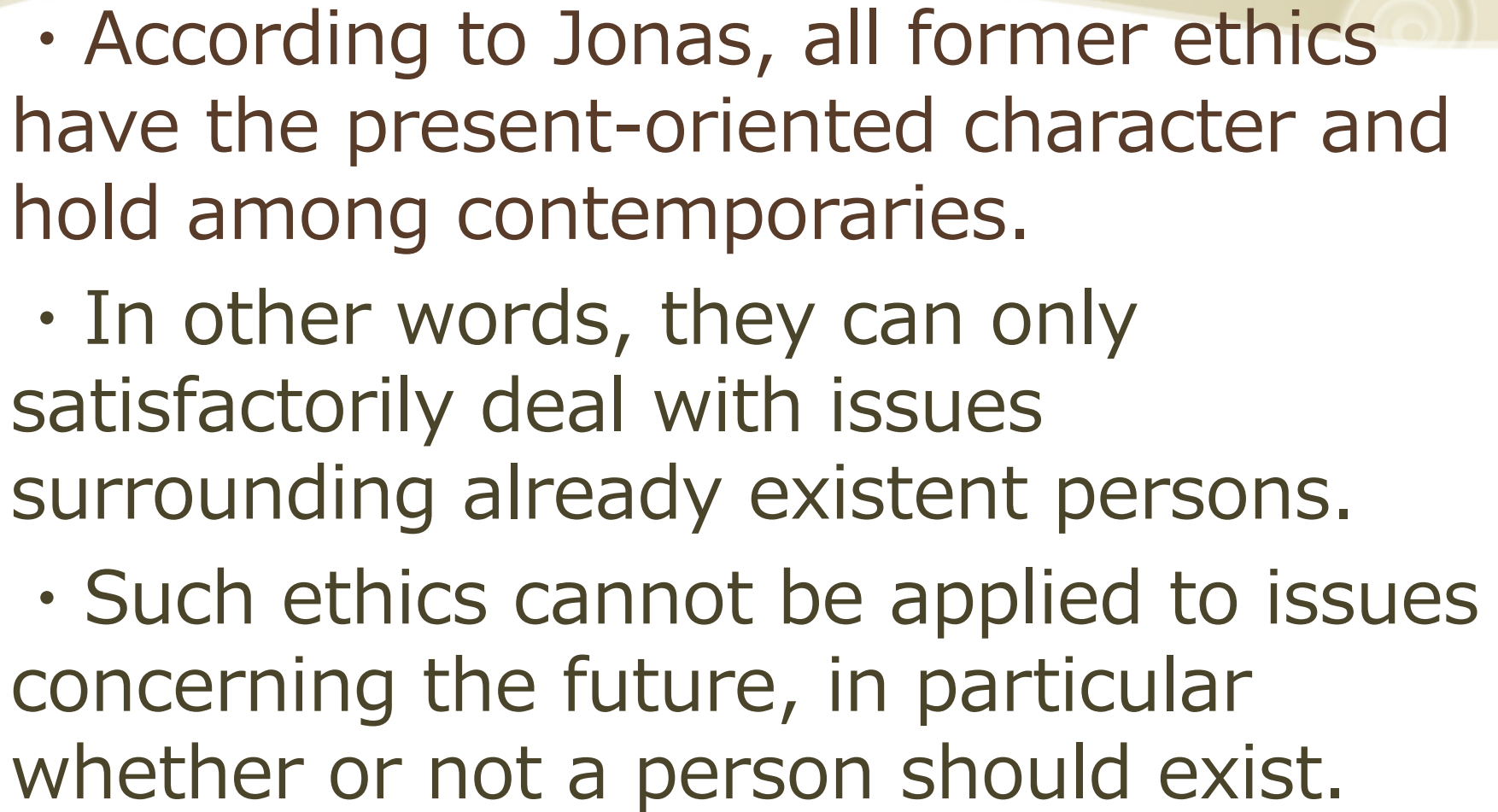
- Deontology and contractualism basically work as moral constraints holding between equal beings who can mutually impose obligations or make contracts.
- There is, however, no *person* yet existent in the case of PGE.


# Hans Jonas

“[the traditional idea of rights and duties] grounded upon reciprocity, according to which my duty is counterpart of other’s right... This scheme fails for our purpose. For only that *has* a claim that *makes* claims—for which it must first of all *exist*.”


(Jonas 1985 p.38)



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- According to Jonas, all former ethics have the present-oriented character and hold among contemporaries.
  - In other words, they can only satisfactorily deal with issues surrounding already existent persons.
  - Such ethics cannot be applied to issues concerning the future, in particular whether or not a person should exist.



“This holds even more with respect to the last object of a technology applied on man himself—the genetic control of future man. . . . . Whether we have the right to do it, whether we are qualified for that creative role, is the most serious question



These and similar questions.....shows most vividly how far our powers to act are pushing us beyond the terms of all former ethics" (*ibid.* p.21)


## 2.2 Utilitarianism

- Consequentialism, including utilitarianism, works well only when value is fixed and a utility function is available.
- That is, we can calculate the utility only if it is certain how much pleasure and pain people take from particular things (So Bentham made his lengthy list of pleasures and pains).

# Ronald Dworkin


- But, according to Dworkin, the possibility of genetic designing “shifts the chance/choice boundary that structures our values as a whole, and such a shift threatens, not to offend any of our present values,……but, on the contrary, to make a great part of these suddenly obsolete”

(Dworkin 2000 p.444)




“The terror many of us feel at the thought of genetic engineering is not a fear of what is wrong; it is rather a fear of losing our grip on what is wrong”

*(ibid. p.446)*




- Furthermore, if we come to design from what people take pleasure and pain, the problem will arise that is something like amalgam of the experience machine and adaptive preference formation.

- That is, what is commanded by the principle of utility would be to create the maximum number of people who feel the maximum possible pleasure in their actual situation.



However, as Jonas said,  
“accusation by our future victims  
……would fail to arise if they were in  
agreement with it [fait] or even felt  
quite happy with their condition. But  
such an agreement or happiness might  
be the last thing we should wish for a  
future humanity, if it were purchased  
with the dignity and vocation of man”





“Thus, it could be that we would rather have to accuse ourselves of the fact that no accusation against us issues hence. The absence of protest would then itself be the gravest accusation”

(Jonas 1985 p. 41)

## 2.3 Virtue theory

- Virtue theory seems, compared with deontology and utilitarianism, not formally problematic.
- However, it is dubious that the notion of virtue, which is rooted in traditions of community and custom could be applied to this totally new technology.


# Jurgen Habermas

“Consequently, theories of justice and morality take their own separate path today, at least a path different from that of ethics, if we understand this in the classical sense of doctrine of the right way to live.

# Jurgen Habermas

The moral point of view obliges us to abstract from those exemplary pictures of a successful or undamaged life that have been handed on in the grand narratives of metaphysics and religion”.

(Habermas 2003 p. 3)


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- From the above, traditional normative ethics are not suited for the task of evaluating GPE.
  - Of course, these arguments are against a crude form of each normative ethics. So we can try to elaborate them.
  - But I want to consider another possibility instead.



### 3. Meta ethics

# which way we should go?

- Jonas : ontology and metaphysics
- Dworkin : to identify critical moral background
- Habermas : post-metaphysical thought

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- What is in common between them is the meta ethical perspective.
  - They all seek the condition of possibility that enables us to ask whether PGE is permissible or not  
→ transcendental questions



## 3.1 Jonas's Question

“Whether there ought to be anything”  
“Ought there to be man?”

## 3.1 Jonas's Question

- This question is logically prior to one that asks what sort of people should there be.
- He replies to the question, "yes".  
According to him, there is a value in existence. From here all other duties are derived, including responsibilities to future people. →[realism, naturalism]

## 3.2 Dworkin's Question

“How we could respond to a state of moral free-fall”

## 3.2 Dworkin's Question

- This question arises after moral realism is destabilized and our conventional morality and attitude is challenged. Here we need something more basic than traditional morality.
- Dworkin replies “We must try to identify what we might call a critical moral background: a basic set of convictions” → [a kind of Intuitionism]

# ethical individualism


- first principle : it is objectively important that any human life, once begun, succeed rather than fail, and that this is equally objectively important in the case of each human life.
- second principle : one person has special responsibility for each life.

## 3.3 Habermas's Question


“How should we understand ourselves,  
normative or natural?”

## 3.3 Habermas's Question

- According to Habermas, we cannot hold ethical realism in this post-metaphysical era. Then we moved to kind of ethical irrealism in which existential self-understanding lies at the core.
- However, gene editing opens another possibility: that we are not normative creatures at all.

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- So we need to ask whether we ourselves are/should be normative beings or not, and if we are/should be, in what ways, before asking whether genome editing is permissible or not.






- Habermas' answer is that we should understand humans as normative and autonomous beings, and as such as subjects who have first personal perspective.

[→ kind of noncognitivism,  
constructivism]



## 4. Concluding Remarks

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- Meta-ethics is usually not much mentioned in applied ethics. But traditional normative-ethics is not sufficient for treating new technology like PGE. Some philosophers who are aware of this adopt a meta-ethical perspective to tackle the problem.
  - They search for something that can be the foundation of normative ethics.



- Of course, meta-ethical argument is speculative and abstract, so we cannot expect all people to engage with it.

But if no one does, our argument becomes more and more vacant. At least, we philosophers should not lose sight of the meta ethical point of view.

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