



# Human Gene Patents and the Question of Liberal Morality

Theo Papaioannou

15 September 2006



# Presentation Overview

- Liberal Theories of Morality and IPRs
- The Case of Human Gene Patents
- Conclusion

# Liberal Theories of Morality and IPRs

- Natural Law
- Personality Development
- Just Reward
- Social Welfare

# Natural Law

- **Argument:** IPRs are moral-claim rights that each individual naturally has independently of the laws and government of civil society
- **Fundamental principle:** self-ownership
- **Two provisos:** 'enough and as good' and 'no-waste'

# Personality Development

- **Argument:** IPRs constitute a moral necessity for the development of each individual's personality in ethical community
- **Fundamental Principles:** freedom and social recognition
- **Provisos:** none

# Just Reward

- **Argument:** IPRs constitute just reward for enterprise and merit. Inventors morally deserve to be rewarded for their qualities and talents
- **Fundamental principles:** libertarian principles of justice
- **Provisos:** none

# Social Welfare

- **Argument:** IPRs are justified to the extent that they promote happiness or satisfy preferences in society
- **Fundamental principles:** utility as a maximisation of happiness (hedonistic version) or as a maximisation of preference satisfaction (contemporary utilitarianism)
- **Proviso:** maximisation of the aggregate social utility

# The Case of Human Gene Patents

- **The historical fact:** ‘...over the past 20 years, large number of genes, section of genes and proteins they produce have been the subject of several thousand patent applications’ (NCB, 2002: 5)
- **The problem:** whether human gene patents can be justified in terms of liberal theories of morality?

# Types of Human Gene Patents

**Definition:** Human gene patents contain private property claims to different ways of using a DNA sequence. These ways include:

1. Diagnostic testing
2. Research tools

**Question:** whether granting patents on diagnostic tests and research tools can be morally grounded upon liberal principles of natural law, personality development, just reward and social welfare?

# Diagnostic Testing

- **Natural Law**

- The principle of self-ownership does not apply because DNA sequences such as BRCA1 are not created by a scientist
- The 'enough and as good' proviso is violated

- **Personality Development**

- DNA sequences cannot reflect the personality of a scientist
- Patents of diagnostic tests such as BRCA 1 fail to express social recognition

- **Just Reward**

- Enterprise and merit are social developments
- No individual deserves to benefit exclusively from their talents and capacities

- **Social Welfare**

- Is private property of genetic information the only economic incentive for the development of diagnostic tests?
- Is there empirical evidence that suggests maximisation of social welfare as a consequence of patents of diagnostic tests?

# Research Tools

- **Natural Law**

- ESTs are not intellectual creations but natural phenomena the discovery of which results in the identification of full-length DNA sequences.
- The assertion of patent rights over ESTs does not leave 'enough and as good' to others
- Patenting of partial DNA sequence or ESTs can violate the 'non-waste' proviso

- **Personality Development**

- Partial and full DNA sequences do not reflect personality
- Patents of research tools such as ESTs fail to express social recognition of scientists

- **Just Reward**

- As in the previous case, no one deserves to benefit exclusively from enterprise and merit
- The Kantian categorical imperative might not allow patents of research tools

- **Social Welfare**

- Research tools may inhibit social welfare in various ways

# Conclusion

- Patents of diagnostic tests and research tools cannot be justified; DNA sequences are natural phenomena and not creations of human labour which can be privately owned
- The Lockean provisos cannot justify human gene patents; the latter do not leave alternatives to the naturally occurring DNA sequences
- Human gene patents cannot be justified on the grounds of personality development; DNA sequences reflect interactions between biological and environmental factors and not personality
- Scientists who identify human gene sequences do not morally deserve to benefit exclusively for their enterprise and merit
- Human gene patents are not always justified on utilitarian grounds; patents of diagnostic tests and research tools do not always maximise social welfare. Utility is epistemologically difficult to be measured
- The extension of IPRs to genomics is a political decision that sacrifices liberal morality on the altar of genetic information feudalism



**Thank you for your Attention**