The Golden Rule and Bioethics

A Reflection upon the Foundation of Ethics

By Mette Ebbesen

(Student number 19960635 / 750810-P784 )

The Nordic Master’s Program in Applied Ethics, Centre for Bioethics, Faculty of Theology,
University of Aarhus, Denmark
in co-operation with Centre for Applied Ethics, Linköping University, Sweden.
The Golden Rule and Bioethics. A Reflection upon the Foundation of Ethics

Mette Ebbesen

The object of this thesis is the foundation of ethics. The question is whether there exists a universal core to ethics consisting of a fundamental ethical principle across cultures. This principle could for example be the so-called Golden Rule, which goes as follows: ‘You should do to others what you want them to do to you’. The Golden Rule is to be found in many of the world’s religions and is also reflected in secular society. The rule can for example be found in a political version in legal declarations e.g. the Humans Rights Declaration of 1948. There are philosophers and scientists who interpret the Golden Rule secularly. If one looks at the Golden Rule from a non-religious point of view, it can be understood for instance in the following ways: 1) As a rule which is followed to fulfil self-interest and 2) As a rule concerning role reversal. In this thesis we will go into detail on these two interpretations of the Golden Rule, because as we will see, they can be seen as two very different views of human nature. We will discuss which of the two interpretations of the Golden Rule is most adequate in connection with the description of human beings as moral agents having reason, motives, freedom and responsibility. Furthermore we will focus on the Golden Rule in a Nordic context, in this connection we will look at whether the Golden Rule corresponds to the four bioethical principles presented by the two American philosophers Tom L. Beauchamp and James F. Childress. These principles are the principle of respect for autonomy, the principle of nonmaleficence, the principle of beneficence and the principle of justice. According to the Danish physician Henrik R. Wulff one cannot use Beauchamp and Childress’ bioethical principles as a tool for solving ethical problems in the North, because they do not correspond to the Golden Rule. Wulff argues that the Golden Rule is a moral ideal within the health services in the Nordic countries. The purpose of the thesis is, among others, to analyse and discuss whether the four bioethical principles are implicitly contained within the Golden Rule and whether Beauchamp and Childress’ method can be used to analyse bioethical problems in a Nordic context. Finally, we will set forth an ethical assessment of a treatment within biomedicine. As an example of the application of the four bioethical principles, we will look at whether human somatic gene therapy is an ethical acceptable treatment. Thus my thesis is that the Golden Rule can be viewed as a fundamental ethical principle across cultures and that Beauchamp and Childress’ four bioethical principles correspond to the Golden Rule. That is, I think there is a reason to maintain, that the bioethical principles can be of use for solving bioethical problems across cultures.

Nyckelord
The Golden Rule, Beauchamp & Childress' Four Bioethical Principles, Ethical Assessment of Somatic Gene Therapy
## Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td>v</td>
</tr>
<tr>
<td>About the Author</td>
<td>vii</td>
</tr>
<tr>
<td>1. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2. The Golden Rule – a Rule for the Fulfilment of Self-interest</td>
<td>9</td>
</tr>
<tr>
<td>2. 1. The Golden Rule in Hobbes’ Philosophy</td>
<td>9</td>
</tr>
<tr>
<td>2. 1. 1. Hobbes and His Age</td>
<td>9</td>
</tr>
<tr>
<td>2. 1. 2. Hobbes’ Theory of Covenant</td>
<td>10</td>
</tr>
<tr>
<td>2. 2. Sociobiology and the Golden Rule</td>
<td>14</td>
</tr>
<tr>
<td>2. 2. 1. Sociobiology is Based on Darwinian Theories</td>
<td>14</td>
</tr>
<tr>
<td>2. 2. 2. Human Nature According to Sociobiology</td>
<td>17</td>
</tr>
<tr>
<td>2. 2. 3. Ethics is Genetically Based</td>
<td>18</td>
</tr>
<tr>
<td>2. 2. 4. Altruism</td>
<td>19</td>
</tr>
<tr>
<td>2. 2. 5. Scientific-philosophical Problems in Connection with Wilson’s Theory</td>
<td>23</td>
</tr>
<tr>
<td>2. 2. 6. A Devaluation of Reason</td>
<td>24</td>
</tr>
<tr>
<td>2. 2. 7. The Sphere of Morals</td>
<td>25</td>
</tr>
<tr>
<td>2. 3. The Deterministic View of Human Nature</td>
<td>28</td>
</tr>
<tr>
<td>2. 3. 1. The View of Human Nature in Hobbes’ Philosophy</td>
<td>28</td>
</tr>
<tr>
<td>2. 3. 2. Is the Human Being Able to Transcend Her/His Biological Nature?</td>
<td>29</td>
</tr>
<tr>
<td>2. 3. 3. Humans as Moral Agents</td>
<td>30</td>
</tr>
<tr>
<td>3. The Golden Rule - a Rule Concerning Role Reversal</td>
<td>32</td>
</tr>
<tr>
<td>3. 1. The Universalisability Thesis in Hare’s philosophy</td>
<td>32</td>
</tr>
<tr>
<td>3. 1. 1. The Tension Between Freedom and Reason</td>
<td>32</td>
</tr>
<tr>
<td>3. 1. 2. Moral Statements are Prescriptive</td>
<td>35</td>
</tr>
<tr>
<td>3. 1. 3. Moral Statements are Characterised by Universalisability</td>
<td>36</td>
</tr>
<tr>
<td>3. 1. 4. An Ethical Conflict</td>
<td>38</td>
</tr>
<tr>
<td>3. 1. 5. The Golden Rule</td>
<td>40</td>
</tr>
<tr>
<td>3. 2. Løgstrup’s View of the Golden Rule</td>
<td>41</td>
</tr>
<tr>
<td>3. 2. 1. Exaggeration of the Role of Principles in Ethical Argumentation</td>
<td>41</td>
</tr>
<tr>
<td>3. 2. 2. Intersubjective Relationships</td>
<td>43</td>
</tr>
<tr>
<td>3. 2. 3. The Ethical Demand</td>
<td>45</td>
</tr>
<tr>
<td>3. 2. 4. Sovereign Expressions of Life</td>
<td>47</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>3.2.5. The Golden Rule</td>
<td>49</td>
</tr>
<tr>
<td>3.2.6. The Levels of Ethics</td>
<td>51</td>
</tr>
<tr>
<td>3.3. An Alternative to the Deterministic View of Human Nature</td>
<td>52</td>
</tr>
<tr>
<td>3.3.1. The Logical Positivists</td>
<td>52</td>
</tr>
<tr>
<td>3.3.2. Description of Humans as Moral Agents</td>
<td>54</td>
</tr>
<tr>
<td>3.3.3. The Golden Rule in a Philosophy of Morality</td>
<td>57</td>
</tr>
<tr>
<td>4. The Golden Rule and the Four Bioethical Principles</td>
<td>59</td>
</tr>
<tr>
<td>4.1. Beauchamp and Childress’ Method</td>
<td>59</td>
</tr>
<tr>
<td>4.1.1. Ethical Reasoning</td>
<td>60</td>
</tr>
<tr>
<td>4.1.2. Prima Facie Binding Principles</td>
<td>61</td>
</tr>
<tr>
<td>4.1.3. The principles – a Part of a Common Morality</td>
<td>61</td>
</tr>
<tr>
<td>4.2. General Criticism of Beauchamp and Childress’ Method</td>
<td>62</td>
</tr>
<tr>
<td>4.2.1. Beauchamp and Childress’ Method Stresses Theory in Relation to Practice</td>
<td>63</td>
</tr>
<tr>
<td>4.2.2. Balancing Principles</td>
<td>64</td>
</tr>
<tr>
<td>4.3. Beauchamp and Childress’ Method is More Than Principles</td>
<td>65</td>
</tr>
<tr>
<td>4.3.1. An Application of Bioethical Principles Demands Practical Wisdom</td>
<td>66</td>
</tr>
<tr>
<td>4.3.2. Dialectic Between Levels of Abstraction</td>
<td>67</td>
</tr>
<tr>
<td>4.4. The Revised Edition of Beauchamp and Childress’ Method</td>
<td>68</td>
</tr>
<tr>
<td>4.4.1. Practical Reason and Virtues</td>
<td>68</td>
</tr>
<tr>
<td>4.4.2. Balancing, Reflexive Equilibrium and Specification</td>
<td>70</td>
</tr>
<tr>
<td>4.5. Does a Universal Core of Ethics Exist?</td>
<td>71</td>
</tr>
<tr>
<td>4.5.1. Universalism Versus Pluralism</td>
<td>71</td>
</tr>
<tr>
<td>4.5.2. The Principles Derived From European Ethical Theories</td>
<td>73</td>
</tr>
<tr>
<td>4.5.2.1. The Principle of Respect for Autonomy</td>
<td>73</td>
</tr>
<tr>
<td>4.5.2.2. The Principle of Nonmaleficence</td>
<td>75</td>
</tr>
<tr>
<td>4.5.2.3. The Principle of Beneficence</td>
<td>76</td>
</tr>
<tr>
<td>4.5.2.4. The Principle of Justice</td>
<td>78</td>
</tr>
<tr>
<td>4.5.3. Contemporary European Judicial Culture Reflects the Principles</td>
<td>79</td>
</tr>
<tr>
<td>4.5.4. The Bioethical Principles in a Nordic Context</td>
<td>80</td>
</tr>
<tr>
<td>4.5.5. Which Ethical Principles are Implicit in the Golden Rule?</td>
<td>83</td>
</tr>
<tr>
<td>5. Bioethics in a Pluralistic Society</td>
<td>86</td>
</tr>
<tr>
<td>6. The Ethics of Gene Therapy – an Application of the Four Bioethical Principles</td>
<td>88</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>6. 1. What is Gene Therapy?</td>
<td>88</td>
</tr>
<tr>
<td>6. 1. 1. The First Treatment With Gene Therapy of Humans</td>
<td>89</td>
</tr>
<tr>
<td>6. 1. 2. Forms of Gene Therapy</td>
<td>91</td>
</tr>
<tr>
<td>6. 1. 3. Gene Transfer</td>
<td>93</td>
</tr>
<tr>
<td>6. 1. 4. Human Servere Combined Immunodeficiency (SCID)-X1 Disease</td>
<td>99</td>
</tr>
<tr>
<td>6. 1. 5. Optimism Regarding Researching into Gene Therapy</td>
<td>100</td>
</tr>
<tr>
<td>6. 1. 6. Gene Therapy Seen in Relation to Traditional Forms of Treatment</td>
<td>103</td>
</tr>
<tr>
<td>6. 2. Ethical Assessment of Somatic Gene Therapy</td>
<td>104</td>
</tr>
<tr>
<td>7. Bioethics – a Dialogue Between Professions</td>
<td>113</td>
</tr>
<tr>
<td>Appendix A</td>
<td>115</td>
</tr>
<tr>
<td>Appendix B</td>
<td>116</td>
</tr>
<tr>
<td>Appendix C</td>
<td>117</td>
</tr>
<tr>
<td>References</td>
<td>118</td>
</tr>
</tbody>
</table>
Preface

The object of this thesis is the foundation of ethics. The question is whether there exists a universal core to ethics consisting of a fundamental ethical principle across cultures. This principle could for example be the so-called Golden Rule, which goes as follows: ‘You should do to others what you want them to do to you’. The Golden Rule is to be found in many of the world’s religions and is also reflected in secular society. The rule can for example be found in a political version in legal declarations e.g. the Humans Rights Declaration of 1948. There are philosophers and scientists who interpret the Golden Rule secularly. If one looks at the Golden Rule from a non-religious point of view, it can be understood for instance in the following ways: 1) As a rule which is followed to fulfil self-interest and 2) As a rule concerning role reversal. In this thesis we will go into detail on these two interpretations of the Golden Rule, because as we will see, they can be seen as two very different views of human nature.

We will discuss which of the two interpretations of the Golden Rule is most adequate in connection with the description of human beings as moral agents having reason, motives, freedom and responsibility. Furthermore we will focus on the Golden Rule in a Nordic context, in this connection we will look at whether the Golden Rule corresponds to the four bioethical principles presented by the two American philosophers Tom L. Beauchamp and James F. Childress. These principles are the principle of respect for autonomy, the principle of nonmaleficence, the principle of beneficence and the principle of justice. According to the Danish physician Henrik R. Wulff one cannot use Beauchamp and Childress’ bioethical principles as a tool for solving ethical problems in the North, because they do not correspond to the Golden Rule. Wulff argues that the Golden Rule is a moral ideal within the health services in the Nordic countries. The purpose of the thesis is, among others, to analyse and discuss whether the four bioethical principles are implicitly contained within the Golden Rule and whether Beauchamp and Childress’ method can be used to analyse bioethical problems in a Nordic context. Finally, we will set forth an ethical assessment of a treatment within biomedicine. As an example of the application of the four bioethical principles, we will look at whether human somatic gene therapy is an ethical acceptable treatment.

Thus my thesis is that the Golden Rule can be viewed as a fundamental ethical principle across cultures and that Beauchamp and Childress’ four bioethical principles correspond to
the Golden Rule. That is, I think there is a reason to maintain, that the bioethical principles can be of use for solving bioethical problems across cultures.

I want to thank my thesis advisor Professor Dr. Theol. Svend Andersen, Faculty of Theology, University of Aarhus, Denmark, for inspiration, critical reading, comments, and for introducing me to the field of bioethics. Furthermore, I want to thank Associate Professor Ph.D. Lars Reuter, Faculty of Theology, University of Aarhus, for inspiration during the teaching in bioethics in connection with the Master’s Program in Applied Ethics. Finally, I want to thank Senior Lecturer Dr. Med. Finn Ebbesen, Department of Paediatrics, Aalborg Hospital, for encouragement and critical reading.

1 Cover Image: ‘The Thinker’ made by the French artist Auguste Rodin (1840-1917) placed within DNA helix.
About the Author

The author of this master’s thesis *The Golden Rule and Bioethics* Mette Ebbesen also takes a master’s degree in molecular biology, Department of Molecular Biology, University of Aarhus, Denmark. In completing the master’s degree in molecular biology she researches into somatic gene therapy. Furthermore she has studied two years of philosophy with a specialisation in ethics, Institute of Philosophy, University of Aarhus.
1. Introduction

In this thesis we will examine the foundation of ethics. The question is whether there exists a universal core to ethics. Is there a basic norm or an ethical principle across cultures? This principle could for example be the so-called Golden Rule, which goes as follows: ‘You should do to others what you want them to do to you’.

On the face of it the Golden Rule says that the human being knows how (s)he would like to be treated, and that (s)he should treat others the same way. According to the rule, the individual must show consideration to others and not fall into self-preoccupation. The Golden Rule is mostly viewed as self-evident. On analysing the Golden Rule, it is not quite that simple. The rule can be expressed and interpreted in many different ways. In discussion of the Golden Rule many questions arise, for example a question as to whether the positive version is equivalent to the negative which goes like this: ‘Do not onto others what you do not want others to do to you’. Another question could be whether the Golden Rule demands that the human being puts herself/himself in the other’s place, and what does putting oneself in somebody’s place entail? The object of this thesis is, among others, to illustrate and discuss these matters.

The Golden Rule is to be found in many of the world’s religions. Hereunder are examples of various versions of the Golden Rule.

**Buddhism**

“Hurt not others in ways that you yourself would find hurtful”. *Udana-Varga* 5:18.

**Confucianism**

“Surely it is a maxim of loving kindness: Do not unto others what you would not have them do unto you”. *Analects* 15:23.

**Taoism**

“Regard your neighbour’s gain as your own gain and your neighbour’s loss as your own loss”. *T’ai Shang Kan Ying* P’ien.

Judaism

“What is hateful to you, do not to your fellow men. That is the entire Law; all the rest is commentary”. Talmud, Shabbat 31a.

Christianity (Biblical ethics)

“All things whatsoever ye would that men should do to you, do ye even so to them; for this is the Law and the Prophets”. Matthew 7:12.

Christianity (Lutheran ethics)

According to Luther the Golden Rule is a summarisation of the Natural Law: “Christ himself summarised in Matthew 7 all the prophets and the laws of the natural law: ‘That you want others to do to you, that you must do to them’”. Wider die himmlischen Propheten, 1. Teil, p. 80.

Islam

“No one of you is a believer until he desires for his brother that which he desires for himself”. Forty Hadith of an-Nawawi.

Apparently, some religions, i.e. Confucianism and Buddhism, formulate the Golden Rule in its negative form, while Christianity formulates it positively. Robert Kane writes:

“The negative formulations of Confucius’s Analects and several of the others (“Do not unto others..”, “Hurt not others..”) are sometimes said to express the ‘Silver Rule’, but the general thrust is very much the same as the traditional Golden Rule (“Do unto others..”). We do not go wrong if we take them as expressing the same principle”.

Contrary to this, John Topel holds that analysis of the two literary forms reveals the greater extension and benevolence evoked by the positive formulation of the Golden Rule. He writes that the positive formulation governs a greater range of actions than does the negative. We can see that by analysing the following two principles: The principle of nonmaleficence and the principle of beneficence. According to Topel, the principle of nonmaleficence: One ought not to inflict evil or harm, underlies the Silver Rule. Note however, that the principle prohibits an action, it neither commands nor recommends any positive action, which an ethical agent ought to undertake. Contrary, the principle of beneficence: One ought to do that which benefits, commands all positive, beneficial actions. Topel maintains that this is the general principle

---

3 Robert Kane: Professor of Philosophy, University of Texas, Austin, USA.
4 Robert Kane, op.cit., p. 34.
5 John Topel: Professor of Biblical Theology, Seattle University, USA.
underlying the Golden Rule. The difference of the two principles will be discussed further in chapter four.

Religions not only formulate the Golden Rule differently, they also do not interpret it similarly. According to the teaching of Confucius (551-479 B.C.) the ideal is that humans should spontaneously express goodness. The ideal is that there should be no self-conscious hesitation. The question is how to attain this ideal or whether one can attain it. According to Confucius, spontaneity is attained gradually with the help of self-discipline. Gradually the heart learns to rechannel the energies of unacceptable impulses, i.e. the heart learns only to entertain right motives. The Golden Rule plays an important part in connection with expressing spontaneous goodness. Jeffrey Wattles writes the following concerning the Golden Rule and Confucius’ teaching:

“First, the practice of the rule strengthens the virtues conducive to humane relationships in an orderly society. Second, the rule symbolises the goal itself, the way of relating that is ideal. Third, the rule functions as a thread of continuity between levels of interpretation that range in focus from social-ethical norms to philosophical and spiritual realisation.”

According to Confucius, the Golden Rule is not an easy principle to follow. The reason is that the rule does not only concern external actions but also desires.

The Golden Rule is viewed differently according to context. When one looks closer at Jesus’ preaching, the ethical requirements that are a part of it are put forward with reference to the breaking forth of the kingdom of God. With reference to the breaking forth of the kingdom of God the ethical aspect of the preaching of Jesus does consist in he requiring a change of attitude or heart and a corresponding way of acting. So for Jesus, it is the proximity of God’s kingdom that is the reason for the normative. But the question is; what consequence does focussing on the nearness of God’s kingdom have for how the human being acts towards others? In the commandment of neighbourly love it appears what kind of human action Jesus does require in reference to the kingdom of God. The meaning of the commandment

---

8 Jeffrey Wattles: Associate Professor of Philosophy, Kent State University, USA.
9 Jeffrey Wattles, op.cit., p. 15.
10 Jeffrey Wattles, op.cit., p. 18.
11 Mat. 22,37-39.
of neighbourly love appears in the story of *the Good Samaritan*. According to the story, what counts is to help the other human being, if (s)he is in a situation where (s)he needs one’s help. Neighbourly love in the story is about *being* compassionate as well as *practising* mercy. Neighbourly love is both a disposition and a line of action. It is not unambiguous if the commandment of neighbourly love contains exactly the same as the Golden Rule. The claim of Christianity is that if one accepts the new possibility of life, as atonement makes possible, and enters into the suffering that is part of being a human, then one will be able to suffer with others and occupy oneself with fighting off their concrete sufferings. This is a neighbourly love that fulfils the Golden Rule. Yet the motivation for neighbourly love is different than that for the Golden Rule. The motivation for the Golden Rule takes the following form: Because one expects goodness, one should show goodness to others. The motivation for neighbourly love, on the other hand, takes the form that through atonement one can view one’s life as a blessing and that is why one will act well towards others. Both the Golden Rule and the commandment of neighbourly love are radical, which means that they cannot be practised from an ulterior motive. One can describe this by the fact that there is in both principles a demand for one-sided altruism.

In this thesis we will, among others, focus on the Golden Rule in a Nordic context. The Lutheran-evangelical church is the established church in the North, therefore we will examine the ethics of Martin Luther (1483-1546). According to Luther, the Golden Rule is the secular parallel to real neighbourly love. This appears in Luther’s so-called *Doctrine of the Two Kingdoms*. Luther maintains that in order to understand how Christendom can exist and unfold in the world, one must differentiate between *Two Kingdoms*. God exercises one regime, one dominion, over humans. According to Luther, God exercises His regime in two different ways, the *Spiritual Kingdom* concerns human beings’ inner relationship to God. Here God rules through Christ and the Gospel, with the result that by belief being established in human beings, sin is fought off. The *Worldly Kingdom* concerns human beings’ external lives with each other. Here, God rules through the authorities and through the law in its political use. A

---

13 In the preaching of Jesus a radicalising of the concept neighbour takes place. Here, a neighbour is any human being whom it is possible to help (a neighbour could also be one’s enemy) [Svend Andersen & Karsten Klint Jensen, *Bioetik*, Denmark: Rosinante Forlag a/s, 1999, p. 300. Mat. 5,44].
16 Martin Luther: German Theologian.
17 Luther makes a distinction between the law of human beings and the Law of God (*lex eterna*). In this distinction between the law of humans and the Law of God lies a contradiction between two ways that the human being can live in accordance with a law. One can keep the law of humans out of fear of punishment. This living in
part of the job of the authorities is to use their power to enforce the law. One is not fighting
off sin here, but it is kept down by force. In the worldly kingdom, humans are forced to up-
hold the law. Luther thinks that it is the job of the Christian to translate her/his neighbourly
love into the political and social practice. He maintains that when the Christian translates
her/his neighbourly love into the political and social arena (s)he is driven to the same acts as a
human who, from her/his natural reason and consciousness, attempts to live by the Golden
Rule. In the Worldly Kingdom it is therefore possible for Christians and non-Christians to
come to an agreement concerning what right conduct is. Luther thinks that the human being,
as created in the image of God (imago Dei), is able to act correctly from her/his natural rea-
son. One must distinguish between neighbourly love connected to Christianity and
neighbourly love as an equivalent of the Golden Rule and as a summarisation of natural law
(lex naturalis). The first belongs to the Spiritual Kingdom and the other belongs to the
Worldly Kingdom.18

As we can see, the understanding of the Golden Rule does depend on the context in which one
views it. The Golden Rule is not a sentence with a single meaning, but that does not mean that
the rule can be understood in a dozen different ways without having a core of meaning in
common. As will become apparent in the thesis, there is a unity in the understanding of the
Golden Rule, which justifies that one refers to the Golden Rule.19

The Golden Rule is also reflected in secular society. The rule is to be found in a political
version in legal declarations, for example in the Human Rights Declaration of 1948 the fol-
lowing quotation is to be found: “All human beings are born free and equal in dignity and
rights. They are endowed with reason and conscience and should act towards one another in a
spirit of brotherhood”.20 This could be interpreted as the Golden Rule. According to the con-
vention, the human being must show respect and regard for her/his fellow human beings.21

accordance with the law could be reluctantly and under coercion. This is called external offence. But the law of
God can only be kept out of free will and love of the law. The difference lies in the disposition [Svend Andersen,
1998a, op.cit., p. 84].

18 Svend Andersen, 1998a, op.cit., pp. 80-92. Svend Andersen et al., 1995b, The Lutheran Approach to Bioethics,
19 Jeffrey Wattles, op.cit., p. 5.
21 Richard T. Kinnier et al., A Short List of Universal Moral Values, in Counselling & Values, Vol. 45, No. 1,
(pp. 4-16), 2000.
There are philosophers and scientists who interpret the Golden Rule secularly. If one looks at the Golden Rule from a non-religious point of view, it can be understood for instance in the following ways:

1) As a rule which is followed to fulfil self-interest.

*Thomas Hobbes* (1588-1679) maintains that by reason the human being realises that to follow the rule benefits her/him in her/his own self-preservation.

According to *Sociobiology*, the human being follows the Golden Rule, because it heightens the fitness of the individual and thereby heightens the chance for copies of her/his own genes to be passed on to the next generation.

2) As a rule concerning role reversal.

For *R. M. Hare* (b. 1919), universalisability and role reversal go together. Hare advocates the so-called universalisability thesis, in which to pass a moral verdict is to be obligated by a common rule of action. One reaches this common rule of action by putting oneself in place of the people affected by one’s actions (role reversal). According to Hare, the ethically correct action is the action that implies the greatest fulfilment of preferences for all involved.

According to *K. E. Løgstrup* (1905-1981), on the other hand, apparently it is only a question about role reversal. Løgstrup thinks that, in the meeting with the other person, human beings stand in front of an ethical demand to have regard for the life of the other being. This is done by putting oneself in the place of the other person.

The Golden Rule also plays an important part in bioethics. According to the Danish physician *Henrik R. Wulff*, the Golden Rule, as formulated in the Bible, is a moral ideal within

---

23 Sociobiology: Branch of biology that concerns itself with the problematic issues of explaining animal and human social behaviour by genetics. Sociobiology seriously appeared as a discipline in the 1970s.
25 K. E. Løgstrup: Danish Theologian and Philosopher. In this thesis Løgstrup is interpreted secularly. In the work *The Ethical Demand*, Løgstrup himself stresses that his ethics can be interpreted secularly [K. E. Løgstrup, *The Ethical Demand*, University of Notre Dame Press, 1997†, translated from: K. E. Løgstrup, *Den etiske fordring*, (first published in 1956)].
27 The term bioethics is used in this thesis about the practice of using ethical theories or principles in cases within biotechnology and medical science.
28 Henrik R. Wulff: Physician and former Professor in Medical Ethics, Copenhagen University, Denmark.
the health services in the Nordic countries. He does not think that one should understand the Golden Rule in the way of referring one’s own wishes and needs to the other. On the contrary, one should help the other to further the person’s happiness in the way one wishes one’s own happiness to be furthered. The two American philosophers, Tom L. Beauchamp and James F. Childress, have developed a method consisting of four bioethical principles to illustrate ethical problem formulations within medical science and biotechnology. These principles are the principle of respect for autonomy, the principle of nonmaleficence, the principle of beneficence and the principle of justice. Wulff maintains that one cannot use Beauchamp and Childress’ bioethical principles as a tool for solving ethical problems in the North, because they are ranked such that the principle of respect for autonomy comes first and therefore do not correspond to the Golden Rule. This attitude corresponds to Søren Holm’s theory that Beauchamp’s and Childress’ bioethical principles reflect American society, and for this reason alone they cannot be used outside the US.

This formulation of the problem points back to the basic formulation of the problem outlined at the beginning of this chapter, as to whether there exists a universal core to ethics. If the Golden Rule can be viewed as a fundamental ethical principle across cultures, and Beauchamp and Childress’ four bioethical principles correspond to this, then there is reason to think that the bioethical principles can be of use in outlining formulations of ethical problems across cultures.

**Problem’s Formulation**

The thesis’ purpose is first of all to analyse and discuss how the Golden Rule can be understood. We will go into detail on the view of the Golden Rule as 1) A rule for the fulfilment of self-interest as Hobbes and Sociobiology interpret it and as 2) A rule on role reversal as Hare and Løgstrup view it. We will focus on Hobbes’ philosophy and Sociobiology because they...
are characteristic spokesmen of the deterministic view of human nature. Next, we concentrate on Hare’s and Løgstrups philosophies because they present an alternative to the deterministic view of human nature. We will discuss which of the two interpretations of the Golden Rule is most adequate in connection with the description of humans as moral agents having reason, motives, freedom and responsibility. The purpose of the thesis is furthermore to focus on the Golden Rule in a Nordic context. In this connection we will look at whether the Golden Rule corresponds to the four bioethical principles presented by Beauchamp and Childress, and ask if the principles can be of use for solving bioethical problems in the North. Finally, we will set forth an ethical assessment of a treatment within biomedicine. As an example of the application of the four bioethical principles, we will analyse and discuss whether human somatic gene therapy is an ethical acceptable treatment.

Thus my thesis is that the Golden Rule can be viewed as a fundamental ethical principle across cultures and that Beauchamp and Childress’ four bioethical principles correspond to the Golden Rule. That is, I think there is a reason to maintain that the bioethical principles can be of use for solving bioethical problems across cultures.

Organisation of the Thesis

I organise my presentation in the following way: In chapter two we focus on the Golden Rule as a rule for the fulfilment of self-interest as Hobbes and Sociobiology view it. In chapter three we go into detail on the Golden Rule as a rule concerning role reversal as Hare and Løgstrup interpret it. Then in chapter four we concentrate on the Golden Rule and the four bioethical principles. In chapter five we ask how to solve bioethical problems in a pluralistic society. Next, in chapter six as an example of the application of the four bioethical principles we make an ethical assessment of somatic gene therapy. Finally in chapter seven, we will end by describing bioethics as an interdisciplinary academic discipline.

36 By focusing on Hare’s interpretation of the Golden Rule we are focusing on how a utilitarianist (i.e. a consequentialist) regards the rule. In this connection it could be obvious to concentrate on a deontological (i.e. a non-consequentialist) interpretation of the rule. Instead I have chosen to focus on Løgstrups’ view of the Golden Rule, because he presents another interesting non-consequentialist alternative to the utilitarian interpretation.
2. The Golden Rule – a Rule for the Fulfilment of Self-interest

As we mentioned, the Golden Rule can be interpreted in various ways. In this chapter we will present Hobbes’ view of the Golden Rule. After that we will analyse and discuss Sociobiology’s view of the Golden Rule, which has a lot in common with Hobbes’. Finally, we will look at what kind of view of human nature is behind the understanding of the Golden Rule as a rule for the fulfilment of self-interest.

2.1. The Golden Rule in Hobbes’ Philosophy

Hobbes’ work is marked by the time in which he lived. This section therefore begins with a short description of Hobbes’ life and age, after which Hobbes’ theory of covenants will be presented. His view of the Golden Rule is closely connected with his theory that with the help of reason, the human being realises that it is to her/his own advantage to enter into a covenant and from that form a state.

2.1.1. Hobbes and His Age

Hobbes was an English philosopher who lived at the time of the English revolution. He studied in Oxford from the age of fourteen. When he was between 30-40 years old, he made several journeys to France and Italy as a private tutor to young men of the nobility. On these journeys he met, among others, Descartes and Galileo, who inspired him greatly.

Hobbes lived in troubled times of open civil war between royalists and supporters of parliament. This left its mark on his political writings, which deal with the establishment of strong government to ensure order. Hobbes thinks that absolute monarchy is the most effective form of government. Hobbes’ philosophy of nature is clearly marked as having been inspired by the new natural sciences, because as he states the universe is constructed of material particles, which follow mechanical movements. His philosophy is, therefore, basically a theory of movement, where the parallel with mechanics is obvious. Yet at the same time, Hobbes is a rationalist metaphysicist. He seeks, just as other rationalist philosophers before him, a basic principle from which to explain the various surface phenomena. As a renaissance philosopher he seeks this basis for explanation in human beings. He thinks that society must be explained from human nature.


\[2\] Frederick Coplestone, op.cit., pp. 1-31
The Natural Condition

Hobbes’ thoughts of human beings, society and politics are expressed in his work *Leviathan* from 1651. His political philosophy is built on the notion of an imagined natural condition. Hobbes is, as we mentioned, very influenced by the new sciences. He imagines that humans in the natural condition are subjugated by laws of nature in the sense of the new mechanical natural science. It could be laws as for example, that every body in movement continues this movement unless an external force hinders it. Hobbes thinks that the human being is rational, and that (s)he by reason seeks to plan her/his life to avoid these hindrances. This is to be seen in the natural condition, in which the most important thing for the human being is to ensure her/his own continual movement. The highest goal of the human being is to preserve her/his own existence, as there are no laws of the natural condition, humans must use all means for this self-preservation.

According to Hobbes all humans are by nature equal. He writes:

“Nature hath made men so equal, in the faculties of body, and mind; as that though there bee found one man sometimes manifestly stronger in body, or of quicker mind then another; yet when all is reckoned together, the difference between man, and man, is not so considerable, as that one man can thereupon claim to himselfe any benefit, to which another may not pretend, as well as he”.

As the human being in the natural condition seeks to ensure her/his own survival as best as (s)he can, (s)he is, according to Hobbes, exposed to the possibility of attack. The natural condition is therefore in reality a state of war, a war of all against all. Hobbes describes the...
life of human beings in the natural condition as: “solitary, poore, nasty, brutish, and short”. In the natural condition it is therefore difficult for the individual person to ensure her/his own existence. But as survival is the only thing that counts in the natural condition, humans have a natural incentive to bring the natural condition to a halt. The human being realises by the help of her/his reasoning that unlimited freedom in itself is a hindrance for her/his continued life and movement. This results in the human being realising from her/his own nature that it is all about seeking peace and maintaining. So, Hobbes thinks that it is fear of not being able to secure her/his own survival, fear of death, which makes that the human being seeks peace. 

**Formation of the State**

Hobbes maintains that reason makes humans able to come to an agreement about entering into a covenant. This covenant is a means to seek peace. To seek peace is to arrange oneself in a society, wherein there is reciprocal acceptance. Everyone must give up her/his unlimited power of harming others. Yet a problem could arise on entering into this covenant, as there will always be a time-lapse between the individual giving up her/his right and others giving up their rights. In this period, others can attack the individual. One has to be able to trust that others give up their rights as one has given up one’s own. This disadvantage can be avoided, if there is a common power feared by all and which will punish the ones who do not give up their rights. Hobbes does not think that promises are worth anything unless there is a power that ensures they are observed. He expresses this in the following way: “Covenants, without the Sword, are but Words, and of no strength to secure man at all”. When humans pass from the natural condition to society by help of the covenant, then natural rights are replaced by natural laws. In formulating the laws of nature Hobbes makes use of the concept of right. Hobbes describes the law of nature, as the human being’s right to secure her/his own survival by all means. He puts weight on the distinction between right and law. He writes:

“RIGHT, consisteth in liberty to do, or to forbear; whereas LAW, determineth, and bindeth to one of them: so that Law, and Right, differ as much, as Obligation, and Liberty; which in one and the same matter are inconsistent.”

Thus, Hobbes defines the concept of right as liberty to do something or omit something. This right differs from law, which is actually the obligation to do something or to omit something.

---

11 Thomas Hobbes, *op.cit.*, p. 188.
Hobbes describes the law of nature as follows:

“A Law of Nature, (Lex Naturalis) is a Precept, or generall Rule, found out by Reason, by which a man is forbidden to do, that, which is destructive of his life, or taketh away the means of preserving the same; and to omit, that, by which he thinketh it may be best preserved”16.

For Hobbes a law of nature and a law of rights is a law and a right for all mankind, even if there were no manmade legislation. Laws of nature are what constitute a society; they are, as we mentioned, inherent in human nature, and are not a sequence of laws given by God17.

In *Leviathan*, Hobbes operates with nineteen laws of nature18. We will mention the three most important. In the first law, which is called the fundamental one, the idea is that the human being must seek peace, whenever possible, and that (s)he has a right to defend herself/himself19. Here the law of nature and the natural condition unite. From the first law of nature follows the next, which says:

“That a man be willing, when others are so too, as farre-forth, as for Peace, and defence of himselfe he shall think it necessary, to lay down this right to all things; and he contented with so much liberty against other men, as he would allow other men against himselfe”20.

The idea of the second law is that one reciprocally renounces one’s unlimited freedom, i.e. that one reciprocally renounces one’s natural right. Once one has resigned these rights one is obligated to stick to it. The acknowledgement of this duty is founded on self-interest. The reciprocal handing over of rights Hobbes describes as entering into a covenant21. The third law deals with the entering into these covenants. It says: “That men performe their Covenants made”22. In this law we find the source of justice. When a covenant has not been entered into, no unjust action exists. But once a covenant has been entered into, and one does not fulfil it, then one acts unjustly. Injustice can be formulated as not to fulfil the covenant23. The laws of nature are rules that are useful for survival. Hobbes maintains that humans as rational beings realise that the laws of nature must be adhered to, as they ensure peace and thereby survival24.

Yet this is not enough to form a society. Hobbes writes in *Leviathan* that the laws of nature

---

18 Frederick Coplestone, op.cit., p. 37.
20 Ibid.
22 Thomas Hobbes, op.cit., p. 201.
23 Frederick Coplestone, op.cit., p. 37.
are against humans’ natural passions\textsuperscript{25}. But he maintains that the human being by help of reason sees that the only way to ensure her/his survival is to ‘go against’ her/his nature and enter into a covenant\textsuperscript{26}. Hobbes writes:

“Covenant .... which is Artificiall: and therefore it is no wonder if there be somewhat else required (besides Covenant) to make their Agreement constant and lasting; which is a Common Power, to keep them in awe, and to direct their actions to the common Bene-
fit”\textsuperscript{27}.

According to Hobbes, humans helped by the covenant should transfer all their power and strength to one human being or an assembly of human beings, which reduces the will of the people and vote to one will, which is called sovereign. The sovereign must ensure a common peace and safety\textsuperscript{28}. Hobbes describes the rest of the population as subjects of the sovereign. There is no time-lapse between entering into the covenant and the sovereign’s inauguration. The population become subjects as soon as the covenant is done, which means that the political society and the sovereign are established simultaneously\textsuperscript{29}.

The Golden Rule

According to Hobbes, the natural law can be summarised by the Golden Rule. He thinks this mirrors the second law, and about the second law he writes the following: “This is that Law of the Gospell; Whatsoever you require that others should do to you, that do ye them”\textsuperscript{30}. After having gone through the nineteen laws of nature in \textit{Leviathan}, Hobbes writes:

“And although this may seem too subtile a deduction of the Lawes of Nature, to be taken notice of by all men; Whereof the most part are too busie in getting food, and the rest too negligent to understand; yet to leave all men unexcusiable, they have been contracted into one easie sum, intelligible, even to the meanest capacity; and that is, Do not that to another, which thou wouldest not have done to thy selfe”\textsuperscript{31}.

According to Hobbes, the negative and the positive version of the Golden Rule express the same principle. He maintains that the Golden Rule contains all laws of nature within it.

In comparison with Luther’s interpretation of the Golden Rule, Hobbes’ view of the rule has a completely different meaning. As described, Luther thinks that the Golden Rule is the secular parallel to the commandment of neighbourly love. For Hobbes, the Golden Rule is on the
contrary a rule, which is realised by humans’ ulterior motive through reason, and which is followed in order to fulfil self-interest. When the Golden Rule can be followed for ulterior motives, it is not one-sided as the commandment of neighbourly love is. That means that the Golden Rule in Hobbes’ philosophy can’t be equivalent to the actual commandment of neighbourly love.

2. 2. Sociobiology and the Golden Rule

In this section we will go through the theoretical foundations of Sociobiology. We will look at what Darwin’s Theory of Evolution concerns itself, as well as what it meant for traditional human understanding. After that we will present and discuss the Sociobiological Theory. In this connection, we will touch upon the Sociobiological view of ethics, including the Golden Rule.

2. 2. 1. Sociobiology is Based on Darwinian Theories

Charles Darwin (1809-1882) laid the foundations of the modern Theory of Evolution. In 1859, he published *On the Origin of Species*, which created a huge debate. Formerly, species had been viewed as stable in their given forms and functions. The human being was therefore also seen as stable, but having a special status in relation to other species. This idea is to be found both in Plato and Aristotle. On the contrary, according to Darwin all species are changeable, created and formed by adaptation to the environment. That is because more organisms come into being than are able to survive and reproduce, and therefore they must struggle to survive. Organisms adapt to fit nature, i.e. they develop characteristics that enable them to survive in a given environment. Those individuals survive, which from their pool of inherited characteristics are best equipped, and in turn transfer their characteristics to their offspring. Darwin, however, did not know how these characteristics were actually passed on. To explain how variation in inherited characteristics developed and continued was a problem. This was later explained through mutations and Mendel’s Theory of Particulate Inheritance. If a mutation occurs leading to a characteristic that is useful in the given environment, it is passed on to the next generation through inheritance. In this way, over long periods, totally new species evolve. Therefore, there also exists a relationship between species. Seen from this perspective, not a species exists with its own unique relationship towards the others. Darwin’s work created debate because the human being was given a place as a species among other species.

created through natural selection. Therefore, humanity had to revise its ordinary opinion of itself.

**Social Darwinism**

Already in the time of Darwin, biological theories were translated into social, economical and political systems. Herbert Spencer (1820-1903) proposes so-called Social Darwinism. He makes use of Darwin’s theories of struggle and selection in the social arena. According to Spencer, everything in existence must undergo a necessary development. This applies to, for example, biology, geology, the individual being, the society, and languages. Since competition between individuals exists in society as well as in nature, Spencer believes that there is an analogy between the development of an organism and of a society. Spencer sees Darwin’s Theory of Evolution as a confirmation of his own general theory of evolution.

Social Darwinism exists in various forms, but is generally connected to a position that uses Darwinism as an ideological support for a liberal system, a capitalist economy and laissez-faire morals. Social Darwinism is an attempt to apply the Theory of Evolution directly to social ethics. According to laissez-faire morals, every individual must look out for her/his own, i.e. a person has no moral responsibility for others. Furthermore, in regard to this concept of morals, there should be as few rules as possible. These concepts are also mirrored in the way Social Darwinism views the state, which should govern and dictate as little as possible. In this way, the individual should be free to act in the way (s)he wishes. Sociobiology and Social Darwinism have certain things in common. Both build theoretically on Darwin’s Theory of Evolution, their views of human nature are very alike and both reject the individual having moral responsibility.

**Sociobiology**

Sociobiology appeared in a serious way in the 1970’s. One of its best-known advocates is Edward O. Wilson (b. 1929). His two most mentioned works are *Sociobiology. The New*...
Synthesis and On Human Nature, which were published in the 1970's. Another well-known sociobiologist is Richard Dawkins (b. 1941), who is more controversial than Wilson is. In 1976 Dawkins published his work The Selfish Gene.

Wilson defines Sociobiology as follows:

"Sociobiology is defined as the systematic study of the biological basis of all social behaviour. For the present it focuses on animal societies. But the discipline is also concerned with the social behaviour of early man and the adaptive features of organisation in the more primitive contemporary human societies."

He does write though, that complex human societies still lie beyond the subject area of Sociobiology. One of Sociobiology's main theses is that human behaviour is genetically determined. In order to show this, Wilson makes an analogy between animal behaviour and human behaviour. By comparing humans with the primates, he finds that many behavioural patterns are labile, i.e. that they are to be recognised in various degrees in the various primates. Moreover, he finds that other behavioural characteristics are conservative, i.e. they are to be found in almost all groups of primates. According to Wilson, it is more reasonable to assume that these conservative behavioural characteristics, e.g. aggression and altruism, have survived unchanged throughout the evolution of Homo Sapiens. However, this argument does not support the argument that human social behaviour is genetically determined, which is the point Wilson wants to reach. On the other hand, the argument builds on this assumption and is therefore a circular conclusion. If the assumption is accepted, the study will only tell us which characteristics are universal.

Wilson would explain all social behaviour by means of Darwin's theories. As the Theory of Evolution takes its starting point in that nature is marked by the struggle of each individual against everyone else it seems paradoxical that there are some individuals who do help others. The first individual who shows consideration for another is thus doomed to lose. This is an essential theoretical problem for Wilson. The theoretical problem therefore contains an ethical paradox: If struggle for survival belongs to human nature, how do neighbourly love

40 Richard Dawkins: Professor of Behavioural Biology, Oxford University, England.
43 Ibid.
44 The order of mammals that among others includes apes.
and unselfishness, etc. occur? Sociobiology has a problem in explaining how ethics exists in human society.

2. 2. 2. Human Nature According to Sociobiology

Sociobiology reduces the human being to her/his genes. This is expressed in Wilson’s statement that the primary target is to reproduce genes. He believes that the organism is the temporary carrier of genes. Wilson determines human beings ontologically thus: “The organism is only DNA’s way of making more DNA.” Wilson ontologically designates the organism a secondary status in relation to the genes. His view of human beings matches that of Dawkins’. Dawkins characterises the human being precisely as a container of genes or a survival machine for genes. He notes that the genes decide the parameters for behaviour and that these parameters are always in agreement with the principle that all behaviour must be for the purpose of transferring copies of the individual’s own genes on to the next generation. Both Wilson and Dawkins maintain that there exists one gene for each category of social behaviour, and that the only gene of behaviour that matters, purely Darwinianly, is one which survives in the gene pool. Sociobiology considers it important that all behaviour should pay off for the individual or for the closest relatives because they carry copies of their own genes.

According to Darwin, it is the ‘goal’ of evolution to produce as well adjusted individuals as possible. As we mentioned previously, Sociobiology does not say that selection occurs on the level of the individual but rather on the level of the gene, therefore the ‘goal’ of evolution is to spread one single gene-stock as effectively as possible.

Wilson doesn’t think that the human being’s consciousness or reason plays a significant role in relation to her/his actions. He maintains that the role of consciousness or of the brain is to ensure genes for the future: “The hypothalamus and limbic system are engineered to perpetu-

---

48 E. O. Wilson, 1975, op.cit., p. 3.
49 Richard Dawkins, op.cit., pp. 49-70.
50 According to Mendel’s Theory of Inheritance it is only half the genes that carries on to each child. If a woman has six children, each of the mother’s genes will on average show up in three of these children. The more of the children survive, the more copies of the mother’s genes survive to the next generation. To evaluate the fitness of a gene, one must not only take into consideration the individual’s own production, but also to the next of kin. Siblings have 50% of their genes in common, half siblings 25%, etc. That entails that one’s brother’s survival is half as good as one’s own. If one has two brothers and these survive, it is genetically as good as if one survives oneself.
51 ‘Goal’ is set in quotation marks, because it does not make sense to use the word ‘goal’ in connection with evolution. As evolution in itself is not teleological, it does not have a fixed goal.
52 Svend Andersen, 1998a, op.cit., p. 172.
Dawkins explicit gives expression to the influence of consciousness on actions: “Nothing remotely approaching consciousness needs to be postulated.” The actions of the human being are therefore not controlled by her/his reason, but on the contrary have to be seen, purely Darwinianly, to be worthwhile.

Wilson’s reduction of the human being to her/his genes raises the prevailing philosophical question as to whether it is possible to describe the whole by the sum of its parts. R. C. Lewontin has a good point concerning this. He writes, that the total differs qualitatively from its parts. He thinks that there is a dialectical relationship between the parts and the whole. Thus, he maintains that there is interaction between the organism and the genes. Lewontin thinks that both reductionism and holism are methods for describing the same phenomenon; one only views the phenomenon in different ways. Lewontin does not think that either one or the other way of viewing the phenomenon is adequate; they must be combined. He maintains that one is unable to use the same concept to describe the various levels of a phenomenon, e.g. genes cannot have morals. I also reject Wilson’s reduction of the human being to her/his genes, as an organism’s observable characteristic (phenotype) is not a product of her/his inherited makeup (genotype) alone. The environment plays a role in the evolution of the phenotype within the boundaries of the genotype. I am here defending an ontological anti-reductionism.

2. 2. 3. Ethics is Genetically Based

Wilson maintains that ethics should be explained through natural selection. He writes: “The time has come for ethics to be removed temporarily from the hands of the philosophers and biologised.” Wilson thinks, that Sociobiology can explain ethical systems more precisely than philosophers can. He describes the task of biology thus: “To identify and to measure the constraints that influenced the decisions of ethical philosophers and everyone else, and to infer their significance through neurophysiology and phylogenetic reconstructions of the mind.” So, Wilson maintains that the explanations of the philosophers are defective and that biology can trace these defects. Yet, he thinks that a precise genetic code for ethics must wait, until one has reached a more all-inclusive neurological explanation of the processes in the human

---

53 E. O. Wilson, 1975, op.cit., p. 3.
54 Richard Dawkins, op.cit., p. 54.
55 R. C. Lewontin: Professor of Zoology and Genetics, Harvard University, USA.
brain\textsuperscript{61}. To illustrate the failings involved in non-biological ethics, Wilson takes hold of intuitionism, as framed by John Rawls\textsuperscript{62} (b. 1921). Rawls deduces principles about justice from principles that free, rational and equal persons would choose if they should form basic rules for a new society\textsuperscript{63}. Wilson writes that the intuitionist position

"..relies on the emotive judgement of the brain as though that organ must be treated as a black box …. While few will disagree that justice as fairness is an ideal state for disembodied spirits, the conception is in no way explanatory or predictive with reference to human beings"\textsuperscript{64}.

Wilson criticises the philosophers for not researching the origins of ethical systems. Furthermore, he states that the human genotype and the ecosystem, in which it has developed, were formed with extreme ‘unfairness’ and not in a state of equality as Rawls maintains\textsuperscript{65}. From the viewpoint of Wilson, the fault of the intuitionists is that their starting point is human reason or intuition and not human beings developed by natural selection. Furthermore, he criticises the intuitionists for preconceiving a condition of equality on which ethics is based. Wilson thinks that the source of ethics should be explained evolutionarily, and that the starting point is the condition of inequality between individuals.

Wilson establishes that ethics is genetically based. He maintains that morals have developed unconsciously, and that acts of morality to a certain extent are instinctive. Wilson writes: "Innate censors and motivators exist in the brain that deeply and unconsciously affect our ethical premises; from these roots, morality evolved as instinct\textsuperscript{66}. Thereby, as we mentioned, he rejects that ethics originates from reason.

2. 2. 4. Altruism

Kin Selection and Altruism

Wilson’s view of ethics appears indirectly in his research on altruism in animal and human societies. Wilson has observed that one can find altruistic behaviour among animals. He mentions several examples of animals reducing their own fitness in order to help their relatives.

\begin{itemize}
  \item\textsuperscript{60} E. O. Wilson, 1978, op.cit., p. 196.
  \item\textsuperscript{61} E. O. Wilson, 1975, op.cit., p. 575.
  \item\textsuperscript{62} John Rawls: American Philosopher.
  \item\textsuperscript{63} It can be problematic that Wilson designates Rawls as an intuitionist, if the concept is to be understood as it is in connection with G. E. Moore’s (1873-1958) philosophy. See Poul Lübcke (editor), \textit{Vor tids filosofi. Viden-skab og sprog}, Vol. 2, Copenhagen: Politikens Forlag A/S, 1996, pp. 51-54.
  \item\textsuperscript{65} E. O. Wilson, 1975, op.cit., p. 562.
  \item\textsuperscript{66} Ibid.
  \item\textsuperscript{67} E. O. Wilson, 1978, op.cit., p. 5.
\end{itemize}
For instance there are several kinds of animals, who warn their flock about danger by whistling. The whistling involves the attention of the enemy being directed towards the one who warned the others. This animal puts its life on the line for the others in the group. Another example of altruistic behaviour is that chimpanzees share their food with their nearest kin. Furthermore, they adopt each other’s young if the parents are unable to look after their offspring. One finds altruistic behaviour in all sociable insects. As an example Wilson mentions the bee. Some bees (worker-bees) are sterile, which can seem paradoxical purely evolutionarily. But the workers help their next of kin, so the chances of survival for the next of kin become greater. With it copies of the worker’s genes are passed on to the next generation through the relatives. Another type of altruistic behaviour in bees is that they offer their lives for the others in the colony. Wilson writes: “The fearsome reputation of social bees and wasps is due to their general readiness to throw their lives away upon slight provocation”. A bee stings its potential enemies with its barbed sting. Seen from an evolutionary point of view it seems strange that the bee dies after having stung the enemy. But the colony, viewed as a whole, gains more than it loses. When animals sacrifice themselves, it leads to fewer offspring than they would otherwise have had, i.e. their genes do not survive to the next generation, and one should therefore think that ‘altruistic genes’ would in general fall in frequency within the population and finally disappear. But why then does altruism live on? As we mentioned, Wilson has found that altruism is often to be found among relatives; therefore he maintains that ‘altruistic genes’ live on in a population by kin selection. In this connection, Wilson uses the concept inclusive fitness, developed by Hamilton in 1964. Inclusive fitness is defined as: “The sum of an individual’s own fitness plus the sum of all the effects it causes to the related parts of the fitnesses of all its relatives”. So, Wilson thinks that purely Darwinianly it pays to help one’s relatives (see this chapter, footnote 50). Altruism is therefore an advantageous attribute and so it survives by selection.

Wilson maintains that kin selection is also found in human beings because humans are often closely connected to their relatives. He mentions homosexuality as a specific example of kin selection. Wilson writes that it can seem paradoxical that homosexuality survives in a population, when homosexuals often have fewer children than heterosexuals. One should think that

---

69 Ibid., E. O. Wilson, 1975, op.cit., pp. 124, 128.
70 E. O. Wilson, 1975, op.cit., p. 117.
71 E. O. Wilson, 1975, op.cit., p. 121.
73 E. O. Wilson, 1975, op.cit., p. 118.
the genes for homosexuality would just slowly die out. But Wilson maintains that homosexuals often were the helpers in primitive societies, and they helped their relatives and thereby raised their own inclusive fitness. The genes for homosexuality survived in the population by kin selection. The type of altruism practised between relatives Wilson calls hard-core altruism. He maintains that this form of altruism is irrational and one-sided, i.e. that the individual does not think of recompense for favours. The above-mentioned examples of altruism in gregarious animals and social insects are therefore all hard-core altruism. This type of altruism drops in frequency and intensity the further apart the individuals’ relationships are from one another as it has its origins in kin selection.

Wilson makes a circular conclusion in connection with the hypothesis about hard-core altruism. He implicitly assumes that altruism is genetically determined. Later, he states that altruism is found in several societies of animals, and that this form of behaviour can be maintained in a population by kin selection. After this he makes an analogy between animal behaviour and human behaviour and finds that altruism is also to be found in human society and that this behaviour characteristic has stayed unchanged in the evolution of humans. From this he concludes that altruism is deeply rooted genetically. But this conclusion is the argument’s premise and the argument is therefore an argument ad hoc.

Reciprocal Altruism

Wilson writes that in the society of human beings examples of reciprocal altruism exist that are not towards relatives. How then, does he explain the ‘survival’ of this type of behaviour in a population, as he will not be able to explain it by kin selection? Wilson calls the altruism that is not towards relatives soft-core altruism. He writes that it is purely selfish. Darwinianly the behaviour pays, because one expects a return from other individuals or from society. Wilson expresses this as: “Give me some now; I’ll repay you later.” He maintains that humans consciously calculate this payback so that in the long run it pays to help others. By this, altruism is at its core selfish behaviour (please note, that here Wilson stresses the crucial role that conscious of humans plays in relation to behaviour). Wilson writes that soft-core altruism has reached extreme heights in the society of humans. The reason for this is that the human

---

75 E. O. Wilson, 1975, op.cit., p. 555.
77 E. O. Wilson, 1975, op.cit., p. 120.
being has an enormous intelligence compared to animals and so remembers arrangements over longer periods, i.e. (s)he remembers to pay the other back. Wilson thinks that the key to human society lies in reciprocity. Human beings enter into “long-remembered agreements”, upon which cultures or the society can build itself. Wilson writes that altruism in the society of human beings is hard-core, when it is directed towards the nearest relatives, while the rest of altruism is soft-core.

Wilson links morals with reciprocal altruism. He writes: “A population at large that enters into a series of such moral obligations, that is, reciprocally altruistic acts, will be a population of individuals with generally increased genetic fitness”. What he means is that it can pay to have morals, because it ensures that the favours will be repaid, and with that fitness increases. ‘Moral genes’ thus survive in a population. By this, Wilson maintains to explain how ethics can be maintained in the society of human beings. He maintains that moral promises entail that it does not pay to cheat. If one cheats, the result is that other individuals lose faith in one. This may result in the fitness of the person in question falling, because (s)he does not receive help from others. Wilson expresses what he thinks is the function of human morals and therefore values:

“Values will be constrained in accordance with their effects on the human gene pool. The brain is a product of evolution. Human behaviour - like the deepest capacities for emotional response which drive and guide it - is the circuitous technique by which human genetic material has been and will be kept intact. Morality has no other demonstrable ultimate function.”

In connection to morals or soft-core altruism, Wilson also commits the fallacy of assuming what he wishes to prove. Wilson assumes that morals are genetically determined and deduces from it that the genes for morals do not die out by natural selection, because they increases the fitness of human beings. From this he thinks there is a basis for concluding that morals are genetically based and so he makes a circular conclusion.

The Golden Rule

Apparently, Sociobiology’s way of viewing the Golden Rule reminds one of Hobbes’ interpretation of the rule. According to Sociobiology, the human being follows the Golden Rule because it furthers her/his own fitness, i.e. to fulfil self-interest. But one must notice that with

---

80 Ibid.
82 E. O. Wilson, 1978, op.cit., p. 120.
Hobbes, self-interest is connected to the concept of reason, while self-interest seen sociobiologically is instinctive and unconscious. Sociobiology also explains norms that demand totally unselfish behaviour, for example the norm of neighbourly love, as unconscious, deeply rooted genetic norms, which increase the fitness of humans.

2. 2. 5. Scientific-philosophical Problems in Connection with Wilson’s Theory

Wilson sets some demands for science. He writes among others that “Real theory is postulational-deductive”, “good theory is testable”, and that science often makes “the fallacy of Affirming the Consequent” or “the Fallacy of simplifying the Cause”, which must be avoided. I do not think that with his theory Wilson stays within his own demands. Apparently, he slips over and over again into the fallacy of assuming that which he wants to prove, thus “the fallacy of Affirming the Consequent”, against which he himself warns. Wilson’s hypotheses do depend on explicandum, and his conclusions are therefore ad hoc. I also think that Wilson makes the second fallacy he warns against, “the Fallacy of simplifying the Cause”. He assumes that there is a gene for each category of social behaviour, a hypothesis he does not test. It is commonly accepted that there is interaction between genes, e.g. coupling between certain alleles, so that there is no single gene corresponding to a certain characteristic.

Wilson runs into yet another problem, when he uses the concepts of the social sciences without discussing the ideological and semantic problems that adhere to social categories. Lewontin writes that a category such as altruism is being treated as if it was a phenomenon of nature of unquestionable status rather than a historically controlled construction. The controversy surrounding choice of category is closely related to which ontological status one ascribes the concept. This discussion is best known from the Middle Ages as the Problem of Universals, but has its roots in antiquity and also seems to exist today. The sociobiologists explicitly maintain that concepts have an independent unchangeable existence (as the Platonic Forms); they have no history and are above time and place. This position is called conceptual-realism or essentialism. On the other hand, Lewontin thinks that our concepts or categories have been decided by society, etc.; in other words, they are variable, relative and limited. This

86 Anthony J. F. Griffiths et al., op.cit., chapter 1-27.
88 The term universale is a scholastic definition for a universal concept as opposed to particulare, meaning particular things.
position is called nominalism. From this point of view, concepts are not seen as depictions of thought or representing something invariable but concepts are only words, used in certain ways after specific rules or conventions that can vary from culture to culture. For Wilson this problem is clear and he softens his position a bit by writing: “Aggression, in short, is a vague term used to designate an array of behaviours, with various functions, that we intuitively feel resemble human aggression\(^89\), but he does not take the consequences. He builds his entire science around his assumptions of realistic concepts. When Wilson draws an analogy between animal behaviour and the behaviour of humans and concludes that conservative behavioural characteristics are genetically determined, he overlooks the fact that the analogies he draws on from animal society were originally introduced by ethologists, who labelled animal behaviour with concepts that stemmed from the social repertoire of human beings\(^90\). We could call this an anthropocentric circular conclusion.

2. 2. 6. A Devaluation of Reason

As previously mentioned, Wilson does not consider reason as the source of ethics; he sees reason as a product of natural selection. He defines consciousness as “as an epiphenomenon of the neural machinery of the brain. That machinery is in turn the product of genetic evolution by natural selection”\(^91\). Wilson does not explicitly touch upon why consciousness or the reason of human beings is developed by natural selection. Roger Trigg\(^92\) writes, that it is strange that consciousness has developed by natural selection, if it is not important for the actions of humans and therefore survival. He thinks that mental processes are important for survival, because they make the organism remember danger and so avoid it in future. He writes that if one ignores the reason of human beings, then one also ignores the ability of humans to make rational choices, which is important when describing human nature\(^93\).

But Wilson does not entirely ignore the consciousness or reason of humans. As we previously mentioned, he maintains that reciprocal altruism has a large frequency of occurrence in the society of humans, because human beings remember arrangements over a longer period. He also writes that humans consciously calculate the recompense of services from other individuals (see section 2. 2. 4.). So he touches upon some of the advantages that consciousness of

---

89 E. O. Wilson, 1975, \textit{op.cit.}, p. 22.
90 R. C. Lewontin, \textit{op.cit.}, p. 249.
92 Roger Trigg: Teacher of Philosophy, Warwick University, England.
humans has over animal instincts. Sociobiology rest on the theoretical assumption, that organisms have evolved by natural selection and that it is only the characteristics that pay off purely on the level of fitness, which survive several generations. Therefore, Wilson implicitly writes that it is the above-mentioned advantages in having a consciousness that have been selected for, and that consciousness by this developed through natural selection.

Wilson gets into trouble by mentioning consciousness in connection with altruism. He introduces consciousness, motivation and rational intentions in connection with an act that he simultaneously mentions as instinctive and irrational. Yet, Wilson’s definition of altruism is very broad and covers both conscious and unconscious acts. He writes: “Altruism. Self-destructive behaviour performed for the benefit of others. Altruism may be entirely rational, or automatic and unconscious, or conscious but guided by innate emotional responses”. Michael Ruse writes that one must watch out not to criticise Wilson for having introduced rationality or consciousness in connection with instinctive acts. He maintains that Wilson uses words as ‘want’ and ‘pay off’ metaphorically, when he writes that an organism wants to maximise its fitness and that it pays to help one’s relatives. He uses the words metaphorically, because literally they can only be applied to conscious acts. Trigg writes, that the normal understanding of the term altruism does not involve acts done in order to further one’s own interests. He thinks the problem is that the term refers to the motive of the acting party, and also to what the agent does. Wilson, on the other hand, attempts to limit the term to a classification of behaviour without referring to the intentions of the acting party. This, Trigg thinks, is causing confusion. Wilson lands in a paradox when he does not differentiate between the intention of an action and the effect of the actions.

2. 2. 7. The Sphere of Morals
Peter Singer (b. 1946) tries to get out of the problems into which Wilson heads, when he looks away from consciousness of humans. Singer develops an ethical theory that, just like Sociobiology, is based on Darwin’s Theory of Evolution. He thinks that Wilson overlooks the fact that there is a rational core to ethics.
Singer begins by establishing that altruism could have developed into systems that look like our ethics. He finds examples of kin altruism and reciprocal altruism in human society and therefore today’s ethics. Singer mentions as an example that we will not send money to children hit by starvation in Africa just like that; we would rather look after our own families. He thinks that this example corresponds to kin altruism. Singer writes that reciprocal altruism is almost as universal as kin altruism. For example, he thinks that there is an implied premise when one gives a present, as one expects to receive one in return.

Singer explains how he thinks the development of altruism into ethical systems has happened. He writes that the reason of humans has developed by natural selection, because to think rationally has its advantages. As reason developed, the human being became aware that (s)he is a being that exists in time, that (s)he has a past and a future. Then (s)he developed the ability to reflect and on the basis of these reflections was able to choose. When the human being developed the characteristics of reflection and communication, it followed that (s)he could decide if the favours exchanged were equal or not. The ability to apply variation to situations was also developed. With this the concept of ‘fairness’ was introduced. Singer maintains that a transformation of our genetically based social practices occurred, developed by natural selection, into rules on how to socialize with each other. I think that Singer commits the same kind of fallacy as Wilson. Singer also maintains that morals are genetically determined, after which he finds examples on how altruism can evolve into ethical systems and then concludes, that morals, viewed fundamentally, can be genetically determined. This is a circular conclusion.

Singer maintains that the rational core of human ethics is the ability to universalise and, by that, the ability to look away from personal interests. When, by means of the faculty of imagination, one sets oneself in place of the persons affected by one’s decision, one universalises. Then one adds the involved persons’ interests up and decides what decision is the most appropriate from the viewpoint that most possible of the interests of all involved should be satisfied. This must be done from an impartial viewpoint, i.e. considering everyone’s interests equally. This form of ethical theory is called preference utilitarianism. Singer thinks that it

---

is reason, which drives the human being to have consideration for individuals outside her/his family whom (s)he doesn’t know. He writes that by way of reason an expansion of the moral sphere occurs, and that it gradually can become universal. He thinks the moral sphere must be extended to all creatures being able to feel “happiness or pain”\(^{103}\). Singer maintains that humans need rules to adhere to. That is because the principle about being impartial is not specific enough to tell what one should be doing in a concrete situation. If one only had the impartial viewpoint to adhere to then every single time one would have to calculate the decision that would maximise the interests of all involved. Singer maintains that the risk in not having rules is that, while calculating one consciously or unconsciously does consider one’s own interests more\(^{104}\).

Apparently, Singer is an advocate of so-called utilitarianism. Yet his theory deviates from classical utilitarianism\(^{105}\), as he thinks one should take interests into consideration and not only happiness and pain\(^{106}\). He manages to get beyond the conventional criticism of utilitarianism, which states that it is not practically possible to put all interests together in each single situation. This he does by stressing humans’ need for practical rules to follow\(^{107}\).

**The Golden Rule**

By developing an ethical theory that nevertheless builds on Darwin’s Theory of Evolution, but which lays stress on the reason of human beings, Peter Singer reaches a view of the Golden Rule, which deviates considerably from Hobbes’ and the Sociobiological interpretation of it. According to Singer, the human being places herself/himself by way of imagination in the place of the persons her/his actions affect. Singer maintains that this role reversal implies universalisability. By putting oneself in somebody’s place one evaluates what the right course of action is, independently of the persons involved, i.e. one evaluates which action would be the right one for oneself if one were in the position of the other person. From this the Golden Rule follows, that one must treat others, as one wants them to treat oneself. Singer does not

---

\(^{103}\) Peter Singer, 1981, *op.cit.*, pp. 113-114, 120.


associate the Golden Rule with self-interest, but rather with universalisability and role reversal. We will return to this view of the Golden Rule in chapter three.

2. 3. The Deterministic View of Human Nature

In this section we will take a closer look at the view on human nature that is behind the interpretation of the Golden Rule as a rule for the fulfilment of self-interest. In this connection, we will stress the view of humans as moral agents that this view of human nature covers.

2. 3. 1. The View of Human Nature in Hobbes’ Philosophy

According to Hobbes, the human being in any circumstance acts in her/his own interest for what benefits her/his own survival. Hobbes maintains that in the natural condition the human being has a natural right to defend herself/himself by every means. In the natural condition what furthers existence of human beings is called ‘good’. What is harmful for humans is on the contrary called ‘evil’. The distinction between good and evil is thereby subjective. Hobbes thinks that human beings have a drive to seek happiness and that the motivation of humans is selfish.\footnote{Jeffrey Wattles, \textit{op.cit.}, p. 77. Yngve Hammerlin & Egil Larsen, \textit{Menneskesyn i teorier om mennesket}, Aarhus: Forlaget Klim, 1999, p. 252.}

As we mentioned, Hobbes’ ground-rules of metaphysics are taken from Galileo’s mechanics. Hobbes thinks that the universe consists of stuff and matter in constant motion. According to Hobbes, a body can only influence another by transferral of ‘movement’ to it by a bump. He thinks that every characteristic of a body in reality is movement. This also applies to mental phenomena. Secondary characteristics, such as colour, taste and smell, etc., are the effect of the motion of matter on human senses. Hobbes is determinist, as he thinks that everything that occurs has a cause necessitating that it happens. He maintains that it also apply to humans’ actions of will. Hobbes does not think that humans have a free will. He maintains that there is no entity in the mind of human beings we can call a will. We cannot use the word ‘free’ according to the will. The word ‘freedom’ can only be used in connection with bodies. Hobbes maintains that it is the human being and her/his actions that are free. According to Hobbes, freedom is absence of outer hindrances upon movement. A free human being for Hobbes is then a human being who can do as (s)he pleases, and thereby is free from outer influences. Freedom then, is freedom of action. With Hobbes, determinism and freedom are therefore compatible. The human being is free if (s)he can do as (s)he pleases; despite her/his
compatible. The human being is free if (s)he can do as (s)he pleases; despite her/his will will be
determined by a chain of causes which leads back to the Prime Mover, that is God.

2.3.2. Is the Human Being Able to Transcend Her/His Biological Nature?
Singer and Wilson’s theories of ethics both build on Darwin’s Theory of Evolution, but arrive
at two very different viewpoints on ethics. According to Wilson, the moral domain only in-
cludes relatives and those one trusts. Singer, on the other hand, expands the moral sphere to
include all creatures able to feel happiness and pain. Singer, just as Trigg, maintains that
Sociobiology only concerns itself with the objective consequences of actions, and not the
motives behind them. Singer writes that our modern, practical ethical systems put stress on the
agent’s motive. He thinks that our moral guidelines either demand a spontaneous interest in
the other or a conscientious decision to do what is right. Singer thinks that humans must be
motivated by doing the actions that correspond to the principle of maximisation of prefer-
ences. On the other hand, Wilson does not think that the human being should be motivated by
a principle, as her/his morals are instinctive and unconscious. When Wilson maintains that
ethics is coded in the genes, he presumes the human being’s inability to transcend her/his
biological nature. It follows from this that Wilson is only able to describe human nature, but
he is not able to deduce how humans ought to act. As we mentioned above, Trigg writes that
when Wilson looks away from the rationality of human beings he also looks away from the
ability of humans to choose. This corresponds to Singer’s statement that ethical premises, and
therefore values, are something one chooses, and with that Wilson is unable to account for
them. So, as we mentioned, Wilson is only able to describe human nature. His biological
determinism makes an ‘ought’ superfluous. But Wilson nevertheless thinks his theory under-
pins three values. The first is “the cardinal value of the survival of human genes in the form of
a common pool over generations”. Wilson describes the second value as “a correct application
of evolutionary theory also favours diversity in the gene pool as a cardinal value”. He thinks,
“universal human rights might properly be regarded as a third primary value”, i.e. Wilson
deduces values from a description and so he makes the naturalistic fallacy.

109 There is a huge discussion according Hobbes’ interpretation of the notion of free will. See Tom Sorell (edi-
110 Peter Singer, 1981, op.cit., pp. 43-44.
113 In modern moral-philosophy generally the naturalistic fallacy is committed, if one deduces evaluating state-
ments from prescriptive premises. Concerning discussion about the naturalistic fallacy see John R. Searle, How
What consequences would it have in the practical life of the human being, if her/his morals were coded in the genes? As we mentioned, every ‘ought’ would be superfluous, i.e. one could not make guidelines for how humans ought to act. If a human being kills another human being because the other person threatens to reduce her/his fitness, reprisals from the side of the state will not result in her/him not going to do such an act again. This is because the actions of the human being are instinctive and that (s)he only acts upon the command of the genes, i.e. Wilson thinks that the human being is unable to resist her/his desires and therefore cannot act differently from what is dictated. In that, according to Wilson’s theory, the human being has no responsibility for her/his actions. This is because responsibility presupposes the ability to act differently. Wilson describes the human being on equal terms with animals and so does not raise her/him above the instinctive. Trigg concludes:

“Man is a biological species, but any attempt to assert that he is no more than that, with characteristics no different in kind from those of other such species, is not only mistaken. It is self-refuting, since no other species could formulate such a theory.”

2. 3. 3. Humans as Moral Agents

According to Hobbes, rights of nature and laws of nature exist in the natural condition, but the laws of nature are not observed. Hobbes maintains that humans form a society according to the laws of nature and so act correctly ethically to fulfil self-interest. Furthermore, Hobbes does not think that human beings have a free will, it means that Hobbes’ view of the human being is deterministic as he does not think that the human being by her/his will, and therefore reason, can go beyond the chain of causes which can be traced back to a Prime Mover.

Wilson also thinks that humans carry out actions ethically from self-interest. To act ethically furthers the individual’s fitness. Wilson maintains that the human being is the sum of her/his genes and that (s)he is unable to go beyond her/his biological nature. He thinks that humans unconsciously act on the genes’ command. These two formulations of the determinist view of human nature lead to the conception that the human being cannot influence her/his own life and destiny. Viggo Mortensen thinks that the deterministic view of human nature contradicts fundamental elements of the humanistic viewpoint of human nature such as freedom,
responsibility and guilt. The question is whether one can characterise humans as moral agents at all, if one maintains that ethics results from self-interest, and one rejects the freedom, responsibility and guilt of human beings. This will be discussed further in chapter three.

Svend Andersen rejects that one can explain humans’ ethical acts by genetic and evolutionary biological factors. Andersen thinks that biology describes and explains ‘behaviour’; that is to say, biology looks at the living creature from an external point of view. Andersen thinks that one cannot be content to describe the actions of humans in this way. One cannot be contented with observing them as ‘behaviour’; one has to understand them. He thinks that the ability to understand human actions goes along with the ability to understand human language. For example, Andersen mentions that the sentence ‘Your behaviour was an offence’ does not mean the same as ‘Behaviour X increases the fitness of the individual’. Andersen does not only think that the two sentences mean something different but that they also belong to two different languages. According to Andersen, it will therefore be meaningless to use the one language to ‘explain’ something that one only can express in the other.

This position matches that of Lewontin’s theory that one cannot use the same concepts to describe the various ontological levels of a phenomenon. Lewontin mentions, as already said, the example that genes cannot have morals (see section 2. 2. 2.). One uses one language to describe an organism on the genetic level and another to describe it on the level of the organism.

117 Svend Andersen: Professor of Ethics and the Philosophy of Religion, Head of the Centre for Bioethics, Aarhus University, Denmark.
118 Svend Andersen, 1998*, op.cit., pp. 244-245.
3. The Golden Rule - a Rule Concerning Role Reversal

So far, we have worked through what the interpretation of the Golden Rule, as a rule that is followed to fulfil self-interest, is about. In this chapter we will focus on the Golden Rule as a rule concerning role reversal. That means that we present Hare’s view of the Golden Rule after which, we will, at first look into the points of criticism that Løgstrup points out in connection with Hare’s theory. Next, we will take a look on an analysis of Løgstrup’s interpretation of the Golden Rule. Finally, we will examine what kind of view of human nature is behind the understanding of the Golden Rule as a rule concerning role reversal.

3.1. The Universalisability Thesis in Hare’s Philosophy

The core of Hare’s moral philosophical theory is the so-called Universalisability Thesis. According to the thesis, one is obligated by a general rule of action when passing a moral judgement. Hare maintains that the thesis demands that the human being puts herself/himself in the persons’ place that her/his actions affect, and in this way human beings get to that action which fulfils most preferences. As we will see, role reversal and universalisability are closely connected in Hare’s philosophy. In what follows we will take a closer look at what the Universalisability Thesis is about and we will examine what role the thesis plays in connection with moral argumentation. Finally, we will present the connection between Hare’s theory and the Golden Rule.

3.1.1. The Tension Between Freedom and Reason

Hare thinks that it is the job of moral philosophy to explain the logical structure of the language of morals. He writes:

“Ethics, as I conceive it, is the logical study of the language of morals …. Ethics, as a special branch of logic, owes its existence to the function of moral judgements as a guide in answering questions of the form ‘What shall I do?’”1.

By explaining the logical structure of the language of morals, moral philosophy will, according to Hare, be able to help humans improve to consider moral questions. Hare wants to better the moral discussion. His goal is not to give an answer to the question: ‘What should I do?’ but rather to help humans better to consider and to discuss it. Hare therefore maintains, that his philosophy does not answer the question about wherein the good life consists. Hare writes:

---

“Ethical theory, which determines the meanings and functions of the moral words, and thus the ‘rules’ of the moral ‘game’, provides only a clarification of the conceptual framework within which moral reasoning takes place”.

In order to get a nuanced picture of Hare’s theory one must remember that Hare argues against the positivists, and that the background for positivistic moral philosophy is the thought that there does not and cannot exist an objective universally valid morality (see section 3.3). In other words, morality is relative. According to positivistic moral philosophy, if morality is relative there is a free non-moral choice between different systems of morality. In his works, Hare refers to the French Philosopher Jean-Paul Sartre (1905-1980), because certain points of Hare’s theory correspond to Sartre’s. Sartre emphasises that an objective universally valid morality does not exist. He illustrates this in his famous example of the young man who, during the war, sought his advice. The father had left the young man’s mother, and his elder brother had been killed during the German offensive of 1940. Sartre writes:

“His mother lived alone with him, extremely saddened because of the father’s semi-betrayal and the death of her oldest son. She had no other comfort than him. At this point the young man had to choose between either travelling to England in order to join the Free French forces - and so leaving his mother - or staying and helping her to live on”.

The young man thus asked Sartre what he should do. Sartre answered: “I have only one answer: You are free, make your choice, i.e. find out! No universally valid rule can tell you what to do”. Sartre maintains that when there is no antecedent binding morality, then the human being is free to create herself/himself through her/his choices. He does not think that first humans have obligations and then freedom to fulfil or not fulfil them. According to Sartre, the human being has freedom first and thereafter, if (s)he obligates herself/himself, then obligations. Hare follows this way of thinking. He writes:

“First of all, it is not clear what is meant …. by speaking of moral principles ‘existing’: but even if they (in some sense) exist, I am sure that they do not always exist antecedently, so that all we have to do is to consult them. This is made sufficiently clear by considering Sartre’s well-known case of the young man who was in doubt whether to join the Free French forces or to stay and look after his widowed mother. Sartre uses the example in order to make the point that in such cases no antecedently ‘existing’ principle can be appealed to”.

---

6 Jean-Paul Sartre, op.cit., p. 64. (My translation).
8 R. M. Hare, 1963, op.cit., p. 38.
Just as Sartre, Hare emphasises that when an eternally valid rule does not exist then freedom takes precedence over obligation. According to Hare, this means that the question of what I should do is not a question about what I am obligated to do but rather a question about what I will obligate myself to do. Hare maintains that there is no pressing reason, which means that one ought to act one way rather than another. According to Hare, it is only the human being who can decide which actions (s)he should choose to do if in a moral dilemma. The moral stand of human beings is free. This free stand Hare sees as opposed to the definedness, which for example shows up if one is to answer the question whether the earth is flat or round. If one should answer this question, one could obtain information showing that the earth is round. Without contradiction one cannot accept these informations and at the same time maintain that the earth is flat. In connection with questions of morality, such compelling reasons or information do not exist.

Yet, Hare does think that moral freedom is a freedom with limits. According to Hare, there lies a limiting demand within the very concept of moral decision-making. According to Hare, it is not unimportant what one chooses, when placed in front of a moral dilemma. He thinks that the choice is of importance. It rests with the human being to give thought to it, i.e. to use her/his reason according to her/his ability. Hare thinks that it is about finding the best possible reasons for the choice. So, Hare maintains that the human being is free, but that (s)he is not free to do whatever (s)he wants. Therefore, there is a tension between the fact that the moral standpoint is free and at the same time subject to a demand to be the result of a rational activity. Hare thinks that in order to understand morality one must hold on to the concepts of freedom and reason and clarify them in their mutual interaction. He makes this clarification of concepts by uncovering the logical structure of moral language. His fundamental moral-philosophical thesis, the Universalisability Thesis, is a thesis of the logical structure in the language of morals. The Universalisability Thesis summarises two sub-theses. According to Hare one of the sub-theses is about the fact that moral language is characterised by being prescriptive, i.e. that it consists of prescriptive or action guiding expressions. The other sub-thesis is the thesis that the language of morality is characterised by universalisability. In what follows we will present these sub-theses and we will examine which roles they play in connection with moral argumentation.

---

9 R. M. Hare, 1963, op.cit., p. 46.
13 Jørgen Husted, op.cit., p. 252.
3. 1. 2. Moral Statements are Prescriptive

In the works *The Language of Morals* and *Freedom and Reason*, Hare examines what universal traits characterise moral statements and which differentiate them from other statements. Hare examines the linguistic function of moral statements. He asks if there exists a specific activity the human being does inasmuch as (s)he expresses moral utterances. Many a moral philosopher has pointed out that moral utterances are used to evaluate as opposed to describe. Hare thinks that the characteristic of moral statements as being evaluations is correct but that it is not profound enough. According to Hare, certain moral statements are connected with certain actions. He thinks that the language of ethics is prescriptive, i.e. that ethical language consists of prescriptive or action guiding sentences, for example ‘Comfort the child!’ i.e. that the human being prescribes actions when (s)he expresses moral statements. According to Hare, the most important word in the language of ethics is ‘ought’ as this word expresses prescriptiveness (‘You ought to comfort the child!’). Therefore, Hare thinks it important to examine the logic of the word ‘ought’. The prescriptiveness in the word ‘ought’ implies that by saying the sentence ‘I ought to comfort the child’, one is obligated to act as one says. If one does not act as one has uttered, one shows either that one has not understood the moral meaning of ‘ought’ or that one is insincere. Hare writes:

“In the case of first-person commands (‘Let me do so and so’) and resolves (‘I will do so and so’), which are closely similar to one another, affirmation and assent are identical. It is logically impossible for a man to dissent from what he himself is affirming (though of course he may not be sincere in affirming it).”

If a person directs the imperative ‘Comfort the child!’ to another, the other’s acceptance of the utterance consists in carrying out the act. That is because one uses an imperative to tell a person what to do and the linguistic function of the words is therefore to prescribe the action. This implies that if one carries out the action one has accepted the utterance. If on the contrary one does not carry out the action, one rejects the utterance. In that case, one is guilty of a logical contradiction, and not just an unreasonable attitude, if one accepts the moral statement and at the same time rejects the imperative.
Hare emphasises that moral utterances presuppose that the person to whom the utterance is directed, are able to carry out what is stated. Kant expresses this as, an ‘ought’ presupposes a ‘can’. Hare does not think that it makes sense to say that a person must act if he is prevented from fulfilling it. He writes:

“It would not do to tell a soldier to pick up his rifle if it were fixed to the ground. And the question which has to arise, if either a decision or the utterance of an imperative is to be in point, is the question which a man is asking himself when he is wondering what to do - the question that is answered, either when one tells someone else what to do, or when he decides for himself. Let us call this kind of question a practical question.”

Hare thinks that prescriptive statements presuppose a ‘can’, because the practical question, ‘What shall I do?’ only arises in situations where a ‘can’ is present.

3.1.3. Moral Statements are Characterised by Universalisability

So, the first half of Hare’s fundamental moral-philosophical thesis characterises moral statements as kinds of prescriptive utterances. The other half of the basic thesis has the purpose of differentiating moral statements from other kinds of prescriptive utterances. What defines moral utterances is that they are characterised by being universalisable. Hare writes: “Moral judgements are a kind of prescriptive judgments …. they are distinguished from other judgements of this class by being universalizable.”

When Hare examines the logic of the word ‘ought’, it shows that besides prescriptiveness, universalisability is a fundamental feature in ethical thinking. In order to show that the word ‘ought’, besides its prescriptiveness, also implies universalisability, Hare analyses the word ‘shall’, which has the same meaning as ‘ought’, but which can also have a non-moral meaning. Hare concludes that both the moral and the non-moral meaning of ‘shall’ imply universalisability. This characteristic is shown by the ethical ‘shall’ in the following example: If one says: ‘I shall comfort the child now’, one cannot then say: ‘I can imagine a situation, which is like this one in all points except that I am not obligated to comfort the child’. Such an assertion would be self-contradictory, which implies that one does not understand the logic of the

24 Immanuel Kant (1724-1804): German Philosopher.
26 Jørgen Husted, op.cit., p. 256.
27 R. M. Hare, 1963, op.cit., p. 54.
28 Jørgen Husted, op.cit., p. 256.
29 Ibid.
30 R. M. Hare, 1963, op.cit., p. 4.
word ‘shall’. If, by use of the word ‘ought’ or ‘shall’ one prescribes that one should act in a particular way, one simultaneously says, that in similar situations one should act the same way. That means that Hare thinks one should judge two situations similarly, which in all descriptive ways are identical. He writes:

“I have argued that moral judgements, when intended seriously and with their full force, must be taken as committing the speaker to some universal judgement applying to anyone in a relevantly similar situation”.

This implies that one is bound by moral assertions, and that one cannot let oneself be driven by one’s own interests. Therefore Hare thinks that one must be ready to universalise, when one makes a moral statement, i.e. one must put oneself in place of the persons affected by one’s actions.

In Hare’s somewhat later work *Moral Thinking: Its Levels, Method and Point* answers the question ‘What shall I do?’, i.e. he gives an answer to the question about wherein the good life consists. Hare thinks that the action to be prescribed in a given situation, is the one that implies the greatest preference satisfaction for all affected. Therefore universal prescriptivism is at the same time a *preference utilitarianism* (please note the parallel to Singer’s theory of ethics, see section 2. 2. 7.). This implies that Hare’s theory tells us that one ought to carry out the action which fulfils the most possible preferences for the ones involved, and that the good life consists in having one’s preferences fulfilled, i.e. Hare makes a correction and settles with the thought that pre-defined principles do not exist. Thus Hare corrects himself; in his first works he claims, that his philosophy does not answer the question about wherein the good life consists (see section 3. 1. 1). In his later work he does answer this question.

Apparently, Hare’s fundamental Thesis of Universalisability tells us that being both prescriptive and universalisable marks moral statements. (Furthermore, Hare maintains that moral statements are also marked by being overriding. Unfortunately, we cannot investigate this assertion further in this thesis. As we mentioned, there is a tension between freedom and reason with respect to moral argumentation. Critical examination of the Universalisability

---

32 R. M. Hare, 1963, op. cit., p. 53.
35 Preference utilitarianism is an ethical theory that has reformed classical utilitarianism. Classical utilitarianism defines the concept of the good from the feeling of inclination. Preference fulfilment, on the other hand, is not necessarily connected to a feeling (see also section 2. 2. 7.) [R. M. Hare, 1981, op. cit., p. 103. Svend Andersen, 1998, op. cit., p. 184].
Thesis in Hare’s first two works, shows that freedom from a moral standpoint is connected to prescriptivity and that reason is connected to moral utterances’ universalisability. Hare thinks that the importance of the thesis is that it uncovers a definite logical structure within moral considerations and thus presents them as a rational activity. At the same time, the thesis exposes the freedom of humans with respect to moral considerations. Hare describes the foundational structure of moral considerations and argumentation as follows:

“When we are trying, in a concrete case, to decide what we ought to do, what we are looking for …. is an action to which we can commit ourselves (prescriptivity) but which we are at the same time prepared to accept as exemplifying a principle of action to be prescribed for others in like circumstances (universalizability). If, when we consider some proposed action, we find that, when universalized, it yields prescriptions which we cannot accept, we reject this action as a solution to our moral problem - if we cannot universalize the prescription, it cannot become an ‘ought’.”

3. 1. 4. An Ethical Conflict

In order to understand how Hare views the Golden Rule, it is useful to take a closer look at what role the Universalisability Thesis plays in connection with ethical dilemmas.

An ethical conflict arises when incompatible moral considerations clash, i.e. that in an ethical conflict there exist moral considerations that point towards several different actions. This is often experienced as a clash of feelings. In a concrete situation, one may experience that one has a feeling of what is right or wrong. One believes that the action one feels is right is also ethically right. Hare calls this ethics on the intuitive level. One has to be aware that intuition in Hare’s theory stands for immediate judgement, i.e. refers to the immediate judgement of humans of an action and can be viewed as opposed to critical reflection. Hare thinks that the human being in her/his everydayness exists on this intuitive level. One acts according to prima facie principles, i.e. deeply rooted norms of what is right or wrong, brought about through one’s upbringing. These principles, one can take as valid unless special circumstances speak against it. Prima facie principles appear as strong feelings. This is shown by the fact that it is often connected to being uncomfortable at acting against an ethical norm telling what right conduct is. Though, Hare distances himself from so-called intuitivism, an ethical theory that maintains that one can realise moral facts via direct insight. As we mentioned, Hare is trying to find a place for rationality in morals. He does not think the intuitive to be enough; for example, prima facie principles can come into conflict with one another and completely new

sets of problems may arise, which are not included in existing norms. Hare thinks, it is important that humans being able to step back and review daily norms by critical consideration. If so, one is on the critical level. Here one attempts to define the norms by which one acts and afterwards direct oneself critically towards them. One asks if they are well founded and if there could be other norms and standards, which would be better. Hare maintains that universal prescriptivism counts on the critical level. He thinks that the critical level and the intuitive level are elements of a common structure. He maintains that only archangels only exist on the critical level, they having supernatural force and no human weaknesses. In any situation, an archangel would be able to predict the consequences of different actions, to know what others prefer and immediately formulate a universal principle. On the other hand, ordinary human beings also need the intuitive level, they need some in-built moral rules by which to act; they cannot for each single situation foresee the consequences for every possible different action.

To illustrate how human beings on the critical level use reason to reach a common rule for action that fulfils the greatest possible number of preferences of the ones concerned, Hare mentions the following example, which builds on a well-known parable from the Bible:

“A owes money to B, and B owes money to C, and it is the law that creditors may exact their debts by putting their debtors into prison. B asks himself, ‘Can I say that I ought to take this measure against A in order to make him pay?’ He is no doubt inclined to do this, or wants to do it. Therefore, if there were no question of universalising his prescriptions, he would assent readily to the singular prescription ‘Let me put A into prison’. But when he seeks to turn this prescription into a moral judgement, and say ‘I ought to put A into prison because he will not pay me what he owes’, he reflects that this would involve accepting the principle ‘Anyone who is in my position ought to put his debtor into prison if he does not pay’. But then he reflects that C is in the same position of unpaid creditor with regard to himself (B), and that the cases are otherwise identical; and that if anyone in this position ought to put his debtors into prison, then so ought C to put him (B) into prison. And to accept the moral prescription ‘C ought to put me into prison’ would commit him .... to accepting the singular prescription ‘Let C put me into prison’, and this he is not ready to accept. But if he is not, then neither can he accept the original judgement that he (B) ought to put A into prison for debt.”

---

42 Svend Andersen, 1998a, op.cit., p. 185.
45 Mat. 18,23.
3. 1. 5. The Golden Rule

As we can see, Hare builds his theory around themes that are implicit in the Golden Rule. Wattles write:

“Hare developed themes implicit in the golden rule as the basis for an entire theory of moral reasoning …. The reasoning associated with the imaginative role reversal became the primary test for moral judgments. Given inclinations about how one wants to be treated plus an awareness of the facts of the case plus a vivid imaginative awareness of the recipient’s actual or possible situation (if the action in question is performed), the test is whether the agent is prepared to prescribe the action, no matter which role - agent or recipient - he might occupy”.

Hare presents so-called Golden Rule arguments in some parts of his works. The above-mentioned parable about the creditor in a moral dilemma is an example. According to Hare, Golden Rule arguments build on the logic already implicit in moral language. That is to say, arguments that deal with the Golden Rule are characterised by being prescriptive and universalisable. One must be aware that the Universalisability Thesis does not say that acting in agreement with rules of a certain kind, for example the Golden Rule, must motivate a moral agent. The thesis is a logical thesis that prevents the actor making a logical contradiction when he utters a moral statement; it is about the characteristics of moral language. To illustrate this point, Wattles writes the following about Hare’s aforementioned example from the Bible:

“Logically speaking, the merciless debtor cannot conclude that he ought not throw his creditor into prison. He can only conclude (assuming prescriptions are universalizable) that to throw his debtor into prison is incompatible with his own inclination not to be thrown into prison. Logical considerations alone do not tell him which element of the contradiction to reject - his disinclination to be thrown into prison or his inclination to throw his debtor into prison. The example shows that golden rule consistency (among one’s own prescriptions) is not necessary for a particular moral judgment to be correct. Nor is consistency a sufficient condition of correct moral judgment. We may observe, however, that it is a test of one’s willingness to place oneself on a par with others”.

According to Wattles, the Universalisability Thesis does not say anything about what is ethically right, but rather it tells which actions the agent is ready to prescribe no matter what role (s)he is in. Hare writes:

“At any rate, the man’s action cannot be a breach of the thesis of universalizability, although what he says may be; and this is what we should expect if, as I have been maintaining, it is a logical thesis and not a substantive moral principle …. I shall not go into detail concerning other possible moral principles which might be confused with the the-

---

47 Jeffrey Wattles, op.cit., p. 127.
sis of universalizability. Two famous ones may, however, be just mentioned. The first is the ‘Golden Rule’, if put in the form of a moral principle: One ought to treat others as one would wish them to treat oneself. If this were rewritten to read ‘as others ought to treat oneself’, then the same sort of account can be given of it as of the principles we have just discussed.\(^{51}\)

Hare’s theory does not contain the Golden Rule in a concrete way. However, as the theory does deal with moral statements then it deals with, among others, the Golden Rule.\(^{52}\) Hare writes that he has logically substantiated the Golden Rule. According to Hare, all moral statements, including the Golden Rule, are among others characterised by being prescriptive and universalisable. In the Golden Rule, one prescribes and universalises by aid of the words ‘shall’ or ‘ought’. From this, one can argue that Hare views the Golden Rule as a rule about universalisation and role reversal. As Hare’s view of the Golden Rule contains universalisation and role reversal, it demands unselfish acts, i.e. according to Hare the Golden Rule is one-sided. Hare points out that his interpretation of the Golden Rule is in agreement with the commandment of neighbourly love.\(^{53}\) Unfortunately, this claim cannot be investigated further in this thesis.

### 3.2. Løgstrup’s View of the Golden Rule

Løgstrup thinks that it belongs to the human being’s way of being always to find her/him in relationships with other humans, i.e. that humans are a part of each other’s lives.\(^{54}\) According to Løgstrup the human being confronts an ethical demand about caring for the life of the other being in the meeting with the other person. This is done by putting oneself in the place of the other person. In this section at first we will analyse Løgstrup’s critique of Hare’s theory of moral philosophy. Then we will present Løgstrup’s ethics. In connection with this, we will stress his view of the Golden Rule.

### 3.2.1. Exaggeration of the Role of Principles in Ethical Argumentation

As we have seen, Hare is a spokesman of ethical rationalism. Løgstrup, on the other hand, defends an ethical way of thinking, which on one hand contains a critique of ethical rationalism and on the other hand advocates a form of universalism.\(^{55}\) Løgstrup writes:

“The moral philosopher, no matter to which school of thought he adheres, is almost always forming exaggerated notions concerning the role of the moderating effect moral

\(^{51}\) R. M. Hare, 1963, op.cit., pp. 33-34.
\(^{52}\) R. M. Hare, 1975, op.cit., pp. 207-208.
rules have on our actions and decisions in our everydayness. It is probably caused by their simply transferring their own philosophical engagement with moral rules onto our ordinary lives .... the moral position (is) never .... stronger than when the challenge arises from a dynamic situation in a speeded up moment, so that there isn’t a moment for reflection over moral rules .... As already suggested, rules or principles play a far more modest role than the one which is imputed to them in the third or (fourth) stage of British moral philosophy where principles are conceived of either as general, as with Stephen Toulmin, or as universal, as with R. M. Hare.57

As we will see, Løgstrup thinks that it does not demand rational thinking to let sovereign expressions of life show up in the meeting with the other person. That is sovereign expressions of life show up without human beings mastering it. On the other hand it does demand rational thinking to act in accordance with the sovereign expressions of life; Løgstrup differentiates between the actual expression of life and the concrete action (see section 3. 2. 4.). In a way compared to Hare’s moral-philosophical theory, one can characterise Løgstrup’s ethics as anti-rational. According to Løgstrup, one does not have to move from the intuitive level to the critical. He thinks we have an intuitive knowledge of morals. This point appears in Løgstrup’s critique of Hare’s example of the creditor who finds himself in a moral dilemma. Hare accounts for B not recognising the Universalisability Thesis. Because of this Hare concludes, that there cannot be a moral disagreement between B and another person who recognises the thesis. According to Hare, even if B and the other person have different viewpoints, a moral disagreement cannot exist, as one party does not recognise the Universalisability Thesis. The only thing the other person is able to demand of B is, that he admits that he does not give a moral justification of his action.58 Løgstrup thinks that it is an exaggerated meaning Hare lends the Universalisability Thesis. However, Løgstrup does think that Hare is consistent in relation to his view of it. Hare does emphasise that the Universalisability Thesis is not moral but only logical. According to Hare, it is the Universalisability Thesis itself that constitutes morality, therefore it cannot be moral in itself. It is only when one has accepted the Universalisability Thesis, that one is entering morality or immorality. Without this acceptance of it, one is outside morality, because it is not a moral prescription to submit to the Universalisability Thesis.59 Løgstrup writes:

“But that there should not be moral disagreement because one of the parties does not recognize that form of moral argumentation, is surely wrong, an exaggeration of the importance of moral argument to morality. This shows how fatal it is to insist on moral

56 My insert.
principles, even if they are universal, without reference to the ethically descriptive expressions of life in which those principles are grounded.60

In what follows, we will account for Løgstrup’s ethics, including the sovereign expressions of life, which Løgstrup maintains that Hare overlooks.

3.2.2. Intersubjective Relationships

The method Løgstrup makes use of is called the phenomenological method. In this, he is inspired by Heidegger.61 That Løgstrup’s method is phenomenological means that it is a description of how a phenomenon exists as it shows itself. As the method is descriptive, there should not be evaluations in his analysis. Phenomenology is not an actual science that puts forward a certain theoretical viewpoint about human life, as for example biology or the medical science. Løgstrup thinks that the starting point for phenomenology must be the immediate experience62 (see section 3.3).

As we mentioned, Løgstrup thinks that it belongs to the human being’s way of being always to find herself/himself in relationships with other humans in a way over which (s)he is not master.63 According to Løgstrup, relationships to one another are always marked by interdependency, i.e. reciprocal dependency. Therefore, all human relationships involve us having power over one another. For Løgstrup, the basis of ethics is the individual human being’s power over the other.64

According to Løgstrup there are three characteristics of human life that form a ground for ethics. These are three different forms of human relationships or, in other words, three different kinds of power. The first form is the result of persons being unable to behave personally towards others, i.e. communicate with them, without laying herself/himself open. One expects the other to listen and take one seriously, or in Løgstrup’s words, one expects that “one’s emphasis is being picked up”. So, this means that in every communication one lays oneself open. Løgstrup thinks that this is also shown by humans always meeting each other with a natural trust. One trusts that the other receives one when one dares to go forth. To show trust is the same as laying oneself open. This ‘laying oneself open’ results in the other having

---

60 Ibid. (Translated by Susan Dew and Kees van Kooten Niekerk).
61 Martin Heidegger (1889-1976): German Philosopher.
power over one, as laying oneself open can be used to encroach, exploit, etc., and thus personal power is misused. Moral norms and conventions seek to set a limit on such exploitation of the other person.

The other form of human relationships that is a ground for ethics is that humans can unite around common tasks, they can unite their power to solve them. According to Løgstrup any task and any common life call forth moral rules. There are some unwritten rules of the game to which every single co-worker must adhere. Løgstrup mentions as an example that the collaboration of seamen is driven by the rule of never leaving the other in order to save one’s own skin. Furthermore, any co-worker must have some characteristics corresponding to the norms of co-operation, i.e. a seaman should preferably be brave. Characteristics are stable, permanent qualities, which arise within a fellowship. One can develop these by training. Løgstrup mentions the following examples of such characteristics: Perseverance, keeping one’s word, dependability, loyalty, self-criticism, and bravery.

The third form of human relationships is biologically determined. The sexuality of the human being often makes her/him get together with one of the opposite sex; they have children, and become a family. Biologically determined relationships result in institutions, for example, the institution of marriage. Within these institutions special norms are valid, e.g. fidelity, whose function is to uphold the institutions.

There is a common characteristic of the ethics that is bound to the norms that are a part of the three aforementioned forms of human relationships. The common characteristic is that ethics is relative and changeable. According to Løgstrup, there is a more basic ethical phenomenon that is invariable, which is the ethical demand.

---

73 Ibid.
3. 2. 3. The Ethical Demand

In the work, *The Ethical Demand*, Løgstrup writes that one in strictly human terms can give a definition “of the relationship to the other person which is contained within the religious proclamation of Jesus of Nazareth”. He thinks that the normal opinion is that the commandment of neighbourly love only arises religiously. However, this is wrong according to Løgstrup; the commandment of neighbourly love is the most natural of all commandments. Løgstrup thinks that the commandment has its basis in the realities of human life. In every meeting with the other person, the human being demands that the other person should spontaneously love her/his self-expression without any thought of recompense. According to Løgstrup, one has an expectation that the other person shows an altruistic attitude to one. Løgstrup writes:

“As we know, the commandment goes like this: You shall love your neighbour as thy self - and ‘as thy self’ is to say: From within the love you yourself demand you shall know the love you owe the other human.”

According to Løgstrup, a religious proclamation has to agree with something in the existence of the human being for it to relate to her/him. The proclamation of Jesus relates to a crucial characteristic in the existence of humans, it relates to the relationship of one individual to the other. As we mentioned, Løgstrup thinks that one can formulate the relationship to the other person held in the proclamation of Jesus in strictly human terms. That is because the commandment of neighbourly love springs from a fact of human life, that is the interdependency between humans and the power they have over one another. Løgstrup writes that the commandment could also be formulated as: “The power, which interdependency gives you over another human, you shall use for the best”. In strictly human terms, the commandment of neighbourly love can be formulated as the ethical demand that the human being confronts in her/his meeting with the other person.

Løgstrup analyses the basic ethical phenomenon in relation to the concept of trust. As we mentioned, Løgstrup thinks that in the meeting with the other person one shows trust and therefore lays oneself open. Then the other person has power over one and is confronted with the alternatives of either exploiting this power for her/his own gain or taking the other into

---

77 Ibid. (My translation).
However, at the same time humans are confronted with the demand to take care of the life of the other person. According to Løgstrup the demand lies in the alternative itself. Therefore, he thinks that the ethical demand springs from a fact of human life that is the interaction between laying oneself open and power. From this, the question arises whether Løgstrup makes the naturalistic fallacy by deriving a demand from a fact. However, it is too comprehensive to deal with this issue here.

The demand not only touches upon how humans must care for the life of the other person, it also touches upon how to be in relation to one’s own life. In relation to one’s own life the human being also confronts an alternative, that is if one will see oneself as one’s own sovereign, i.e. view life as something one oneself has to give content, or if one will view human life as full of life possibilities ready to grasp. If one chooses the latter view on existence, then one does not hold oneself to be the most important being in life and therefore one can act unselfishly. It is this choice that the demand insists on: To care for someone else’s life. As the demand insists on an unselfish kind of action it is one-sided. That means that if the human being accepts the demand, (s)he cannot insist on reciprocation from the other person. Løgstrup writes that the demand is unattainable because of human nature. According to Løgstrup, it lies in human nature always to exploit the power (s)he has over the one who lays oneself open.

Løgstrup writes that the demand has two elements. The first is its content, being the demand to care for the other person, which can be derived directly from interdependency as an empirical fact. The other element is the demand’s life-understanding that life is granted and so full of possibilities for which human beings only need reach out. The last element cannot be derived empirically, but, in Løgstrup’s own words, “...it can only be accepted in faith – or else denied.” This is the religious dimension of Løgstrup’s ethics, about which we will not go into detail here.

Løgstrup characterises the demand as silent; it cannot be formulated, i.e. it does not give concrete directions for how one must act towards the other person. The demand does not entail that one must do what the other being explicitly wants. The demand on the individual

---

82 The naturalistic fallacy: See chapter 2, footnote 113.
86 K. E. Løgstrup, 1997a, op.cit., p. 123.
could on the contrary go against the wishes and expectations of the other person if it is for the
other’s benefit. So, the demand assumes that the individual knows best what is for the benefit
of the other. Løgstrup thinks that the human being with her/his insight, imagination and
knowledge of life must find out in what the demand consists. In this way, the demand makes
the individual responsible, as it is only the individual who is able to find out what is for the
benefit of the other person. As it is up to the individual to find out what the demand is all
about, how does one avoid humans, out of sheer beneficence, encroaches on the other person?
Løgstrup writes that the demand can never entail that one takes on the responsibility of the
other being. He writes: “The fact that we are one another’s world does not mean that we
hold another person’s will in our hands.” Løgstrup thinks that the other person must be
treated as an independent and responsible being.

3. 2. 4. Sovereign Expressions of Life

Later in Løgstrup’s authorship, i.e. after the publication of _The Ethical Demand_, he empha-
sizes that a fundamental ethical phenomenon does exist that is yet more fundamental than the
demand itself. This he calls the _sovereign expressions of life_. As examples of sovereign ex-
pressions of life, one can mention trust, sincerity, mercy, frankness of speech, forgiveness and
fidelity. He characterises sovereign expressions of life as spontaneous, definitive and radical.
They are spontaneous because they appear just like that. That sovereign expressions of life are
spontaneous is closely connected to the fact that they are sovereign. It is precisely their sover-
eignity, which means that they accomplish themselves in spite of the will, i.e. the human
being does not decide to show trust for example, it happens in spite of herself/himself. Sover-
eign expressions of life are definitive, that is to say they contain an Either-Or: Either one
shows trust or one shows mistrust, there are no intermediate states. Sovereign expressions of
life are radical, as they are not accomplished with ulterior motives. Løgstrup also introduces
an appellation for the opposites of sovereign expressions of life called ‘forced’ or ‘circling
expressions of life’. Examples of these are insincerity, mercilessness, mistrust, indignation,
jealousy, and envy. They are circulating thoughts and feelings in which the person becomes

---

89 K. E. Løgstrup, 1998, _op.cit._, pp. 32-34.
_op.cit._, pp. 198-199.
93 K. E. Løgstrup, 1993, _op.cit._, pp. 17, 25, 59. K. E. Løgstrup, _Etiske begreber og problemer_, Denmark: Gylden-
caught and thus withdrawn. It could for example be envy; the envious person locks himself in a feeling of some wrong, and circles around it without being able to change the situation. As we have seen, the decisive difference between characteristics and expressions of life is that expressions of life cannot be trained, they are accomplished spontaneously. One must be aware that Løgstrup differentiates between the actual expression of life and the concrete action.

Løgstrup thinks, that sovereign expressions of life are impulses with which humans cares for the life of the other person. Sovereign expressions of life fulfil the demand, but this happens before human beings are conscious of the demand. One is first conscious of the demand, if the meeting with the other person does not bring about a sovereign expression of life, i.e. if the situation does not bring about a spontaneous effort, which it seldom does, then the demand arises. Løgstrup is thus making the correction after the publication of The Ethical Demand, that the unselfish handling of the life of the other person is not only the content of an unfulfilled demand, on the contrary it can be handled through spontaneous expressions of life. The demand is secondary inasmuch as it only steps in if the expressions of life have not arisen. The demand as an ethically secondary phenomenon or ‘substitute phenomenon’ is formulated in the Golden Rule:

“What you want mankind shall do to you - implying: If you were in their place - you shall do to them. The implied: If you were in their place is the element of imagination, while: You shall do to them, is the fulfilment.”

In imagination, according to Løgstrup, the individual should put herself/himself in the place of the other person in order afterwards to carry out what the other would appreciate. (A huge discussion has arisen as to what this role reversal implies. Unfortunately it would be too comprehensive to analyse it deeper here). Expressions of life are now the most basic ethical phenomenon, and the demand is understood from these. This means that the character of the demand changes. In The Ethical Demand, one-sidedness assumes a religious understanding of life, on the contrary spontaneous expressions of life are independent of that. With the help of the Golden Rule, Løgstrup takes for granted that the knowledge needed to do the right thing

---

101 Svend Andersen, 1995b, op.cit., p. 70.
does not assume that one views life as granted. According to Løgstrup, the human being, through her/his imagination, knows how (s)he would wish to be treated if (s)he was in another’s place\textsuperscript{102}. 

3. 2. 5. The Golden Rule

As we mentioned, in the work \textit{The Ethical Demand} Løgstrup explains the demand as being unrealisable because of human nature. According to Løgstrup, it lies within human nature that (s)he will always exploit the power (s)he has over the other person\textsuperscript{103}. After publication of \textit{The Ethical Demand}, Løgstrup, as we have shown, makes a correction, which is that the ethical demand can be fulfilled with the help of spontaneous expressions of life\textsuperscript{104}. Løgstrup writes, “..that with sovereign expressions of life there is a spontaneity that falls on the side of the commandment of neighbourly love\textsuperscript{105}. Løgstrup points out that humans are not master over the fulfilment of sovereign expressions of life, but that the fulfilment is often caught and down-motivated by the motives of the ego\textsuperscript{106}. He writes: “There are two accounts to settle and to keep apart, our given life account and the account of our ego”\textsuperscript{107}. Sovereign expressions of life belong to the human being’s given life account as they have been given along with her/his existence. Therefore, they are by definition good\textsuperscript{108}. Løgstrup accounts for the down-motivation of the spontaneous expression to fulfil the demand with the aid of concepts such as open and displaced trust\textsuperscript{109}. It would be too comprehensive to expound on this theme here.

Løgstrup thinks that sovereign expressions of life are radical, i.e. that they cannot be fulfilled for ulterior motives, so the demand that springs in their place is also radical\textsuperscript{110}. He writes the following:

“The demand finds formulation in, for instance, the Golden Rule: Do unto others as you would have them do unto you. It is anything but a tepid rule of reciprocity even if, taken literally, it might seem such. On the contrary, it is a rule governing the use of the imagination. It requires that we try to imagine how we would wish to be treated were we in

\begin{footnotesize}
\begin{enumerate}
\item[102] Svend Andersen, 1995\textsuperscript{b}, op.cit., p. 71.
\item[107] Ibid. (My translation).
\item[108] K. E. Løgstrup, 1997 a, op.cit., p. 31.
\end{enumerate}
\end{footnotesize}
the other’s stead – and then actually act towards the other in that way. Clearly, it is as radical as anything could be.

Løgstrup writes that when the radical character is moved from sovereign expressions of life to the demand the radical character is distorted. According to Løgstrup, then the radical character comes to signify the impossible. This results in the Golden Rule becoming unattainable if sovereign expressions of life do not step in, which seldom happens because of the motive of the ego. Løgstrup writes: “But as little as we can motivate our natures by the commandment of neighbourly love, just as little are we able to do it by the Golden Rule. Yet, Løgstrup accounts for the element of imagination that is role reversal formulated in the Golden Rule. As we have mentioned, he writes that by the help of imagination one can place oneself in place of the other and then do what the other would appreciate. He writes: “The fulfilment consists in that the individual then does it”. When Løgstrup writes that the demand, and thus also the Golden Rule, are unrealisable because of their radicalism, then the fulfilment of the Golden Rule is unrealisable because the human being, according to her/his nature, is incapable of acting totally unselfishly. Løgstrup writes:

“The demand here under discussion, this radical demand, is not being met. It arose out of the fact that something of the other person’s life has been delivered into my hands and is in my power. But insofar as the demand is ignored, the other person becomes the object not of my care but of my exploitation. When the demand is despised, the fact on which it rests comes to mean that the other person is subjected to my self-assertion and to my desire to promote myself.”

This however, does not result in the human being freely exploiting her/his power over the other for her/his own gain. The social norms, which could be formulations of the expressions of life, as we have mentioned, protect humans against the power of the other person.

Yet, Løgstrup writes that one can devalue the commandment of neighbourly love, and thus the Golden Rule, for use in society, that is, political usage. He points out that the devaluation is not by making the Golden Rule into a rule about reciprocation, because those who need help are often the ones who are not able to reciprocate. The devaluation of the rule for political usage comes about as the person in power is forced to use her/his power, as if (s)he had received it to serve others. In public life this is done by the person in power being entrusted with

111 Ibid. (Translated by Susan Dew and Kees van Kooten Niekerk).
112 Ibid.
115 K. E. Løgstrup, 1997b, op.cit., p. 54.
power, and that (s)he has to be accountable for its usage in light of the fact that Løgstrup writes that the Golden Rule can be devalued for societal usage, I interpret his view of the Golden Rule as a rule to which humans are demanded to live up. The human being must try to live by the rule even if (s)he is never fully able to fulfil it.

3. 2. 6. The Levels of Ethics

Løgstrup differentiates between two groups of phenomena: Expressions of life, characteristics, and norms for co-operation on the one hand and on the other, the Golden Rule and other general principles. The last mentioned are used when expressions of life do not appear or when doubt or conflict arises in relation to what one ought to do. This distinction reminds one of Hare’s distinction between the two levels of ethics. Hare also assumes that humans have intuitive rules of morality. Contrary to Hare, Løgstrup examines the basis for these intuitive norms, and makes the conclusion that in an unconditional way they belong to human life. Thus Løgstrup thinks that ethics is founded within human nature. In light of this, Løgstrup describes his ethics as ontological. Løgstrup criticises Hare for not having examined the basis of morality. He thinks that Hare sticks to the principles and does not examine the ethically descriptive expressions of life in which the principles are founded. Løgstrup writes that the Universalisability Thesis “is founded in and formalises that our existence in its interdependence is fulfilled when we care for the affairs of human beings and that it breaks down when we only think of our own affairs.” So, Løgstrup criticises Hare for not having examined the basis for the Universalisability Thesis. In connection with this, Løgstrup has to keep in mind that Hare is operating with a logical principle and that he himself operates with concepts, which have ethical content. Løgstrup must meet Hare on his side of the fence. Hare is precisely examining the basis of the Universalisability Thesis and concludes that it is a logical thesis characterising moral language. However on the contrary, Løgstrup maintains that the thesis has its basis in sovereign expressions of life, and that it therefore has ethical content.

So, Løgstrup perceives the Golden Rule as a rule about role reversal. Andersen writes that to Løgstrup the Golden Rule appears not to be about universalisability. However, this can be up for discussion, as Løgstrup thinks, as we mentioned, that the Universalisability Thesis “

---

founded in and formalises that our existence in its interdependence is fulfilled., and that the thesis has its basis in sovereign expressions of life. I think that universalisability is an implicit part of the ethical demand and therefore of the Golden Rule.

3. 3. An Alternative to the Deterministic View of Human Nature

The deterministic view of human nature, as we have seen in Hobbes’ philosophy and in Socio-biology, is based on a scientific description of humans. Natural science does not ask why the human being acts as (s)he does in a concrete situation, it only describes how (s)he acts. The scientific way of describing reality is clearly seen in the philosophy of the Logical Positivists.

3. 3. 1. The Logical Positivists

The traditional philosophy of Western Europe holds that in transcending the familiar world of things known to humans by our senses and explored by sciences there is another order of reality that contains values. Among these is Goodness pre-eminent and constitute the grounds of ethics. In other words it is because the universe contains or is a moral order that some things are right and some wrong. This is seen in the philosophies of Plato and Aristotle’s. Some philosophers would include the idea of deity and that deity is the source of values. The study of this reality, which transcends and underlies the familiar world, is called metaphysics.

There is also another tradition, the empirical one, which is particularly strong in English philosophy. Starting with Locke and running through Berkeley and Hume to Mill, it denies the existence of first principles revealed by reason, repudiates metaphysics and holds that all knowledge is derived by sense-experience. Therefore there is no other order of reality than the familiar world of things that our senses reveal and science explores. If there is another order of reality we can have no knowledge of it.

Some aspects of Logical Positivism are derived historically from this empirical tradition 124. One can argue that some aspects of the way Logical Positivism views reality are even derived all the way back from Hobbes. Logical Positivism was a movement that originated in the 1920s among the philosophers of the Vienna Circle. The Vienna Circle mainly consisted of scientifically trained philosophers and philosophically interested mathematicians and scientists under the leadership of Moritz Schlick. The members were radically opposed to meta-

122 Svend Andersen, 1998a, op.cit., p. 248.
The Golden Rule – a Rule Concerning Role Reversal

physical speculation, especially of the a priori and transcendent types. After some years of regular discussion meetings, the Circle organised its first international congress in 1929, attracting sympathizers from many countries, including Britain, Germany and Scandinavia.

The British philosopher A. J. Ayer attended the Circle in 1933 and made its ideas widely known by the publication of the work *Language, Truth and Logic* in 1936.

According to Ayer and other Logic Positivists all propositions that are meaningful may be divided into two classes; those that concern empirical matter of fact and those that are purely analytic. The former have meaning only if they are verifiable. According to the Logical Positivists to be verifiable means, that there is some possible sense-experience that is relevant to the determination of the statements truth or falsehood. It is for instance meaningful to say that all cells contain genomic material because we can conceive the kind of sense-experience that would verify the statement. Analytic propositions are the propositions of logic and mathematics. These are certain because analytic propositions are tautologies. Thus the proposition 2+4=6 is certain because it says the same thing in two different ways. From this one can conclude that Logical Positivists view all metaphysical assertions as meaningless, because these assertions are non-empirical. Metaphysical assertions are about the nature of reality or about a realm of values transcending the familiar world, therefore there is no possible sense-experience that would verify the statements truth or falsehood. In other words no empirical method of determining the truth of metaphysical assertions is given and metaphysical assertions are therefore nonsense. According to the Logical Positivists all ethical principles, prescriptive sentences, directions and commands are meaningless because there is no possibility of verifying these kinds of propositions. Ayer considers the view “that statements of value are not controlled by observation, as ordinary empirical propositions are, but only by a mysterious ‘intellectual intuition’.” He means that what might be intuitively certain to one person may seem doubtful to another. So, Logical Positivists make a contrast between facts and values, and between language that is descriptive and language that is prescriptive, imperative or emotive. For example they regard ethical statements as non-cognitive, these statements do not express knowledge but feelings or attitudes. Ayer presents the meta-ethical consequences

---

129 Ibid.
of the Logical Positivism. According to Ayer the description of X as right or wrong is an expression of personal preference. Ayer argues that the function of ethical language is emotive, i.e. when I for example express my ethical disapproval; I express my feelings (dismay, detestation etc.) about a certain action. This ethical disapproval is purely expressive; it is an outburst of feelings as for example ‘ugh!’ According to Ayer this emotive function of ethical language has a double purpose; by expressing my ethical disapproval I express my own emotive attitude; furthermore I seek to cause a likely emotive attitude by the other person. If the ethical stand is an outburst of feelings it cannot be reasoned. An ethical disagreement is therefore a divergence between different emotional attitudes.

It is clear that Logical Positivism cannot eliminate metaphysics without destroying itself. Their own criterion of meaning is no empirical statement and therefore cannot be verified by an empirical method. The Logical Positivists’ criterion of meaning is therefore nonsense according to their own theory.

3. 3. 2. Description of Humans as Moral Agents

As we have seen, the sources of metaphysical truth are a non-empirical criterion of meaning. If one is dealing with metaphysical questions one must therefore use another method than the scientific one. This is because by using the empirical method one cannot reach the aspects of metaphysics. Here the parallel with Hobbes and Sociobiology is clearly seen. In the description of humans as moral agents Hobbes and Sociobiology maintain, that humans do not have a free will. This is because the presence of a free will cannot be empirically demonstrated. This correspond to Andersen’s point that the formulation of the problem about free will is not scientific but a classical metaphysical problem, and therefore it is insoluble. As we have seen in chapter two human beings has some facets that the deterministic view declares illusory. Løgstrup writes the following about an assumption of a deterministic view of humans: “With that presupposition a whole set of ethical attitudes and their accompanying feelings, passions, and moods are in danger of becoming illusory, such as, responsibility, guilt, duty, conscience, remorse, resentment, indignation, reproach, and self-reproach. As responsibility implies that one could have acted otherwise, i.e. that one has free will; the formulation of the problem about free will contra determinism is seen in this quote. Løgstrup and Mortensen

130 Oswald Hanfling, op.cit., pp. 149-170.
132 Svend Andersen, Determinism or Meaninglessness. The Philosophical Challenge of Science in Kant and Løgstrup, in Free Will and Determinism, Aarhus: Aarhus University Press, 1987, (pp. 100-116), p. 100.
point out, that if human beings should be described as having freedom, responsibility and
guilt, then the starting point must be something other than the scientific. They maintain that
one must look at other experiences than the scientifically empirically verifiable. Mortensen
writes, “we must take seriously the experiences which show themselves in humans’ lives
together which unfolds through daily conversation and which can be described in a phenomenological analysis”. This is the same point as Løgstrup’s. Løgstrup actually writes that the
feeling of responsibility, guilt and freedom, is so convincing that these ethical concepts must
be taken for granted. His argumentation is therefore not a reference to some scientific result, but to the immediate experience of human beings, which is the starting point for phenomenological analysis. Løgstrup criticises empirical naturalism as having reduced reality of essential dimensions. As expressions of life have been given along with life itself, one can say
that they belong to humans’ metaphysical nature. As we mentioned, by phenomenology Løgstrup refers to a method by which one describes and analyses without reducing the phenomenon investigated. A phenomenon could be a sovereign expression of life such as trust. Løgstrup views the phenomenological method of describing a phenomenon as opposed to the scientific method, which demands a methodological and an ontological reduction of the phenomenon. The scientific description eliminates the positive or negative character of a phenomenon. As the sovereign expressions of life are not ethical neutral; they are by definition good in themselves, a scientific description of the sovereign expressions of life will never grasp this aspect of the expressions of life. One can say that the phenomenological method brings to light the meaning that is already contained within the phenomenon itself.

So, Løgstrup presents an alternative to the deterministic view of human nature. He rejects the use of the empirical method to describe humans as moral agents. He holds the view that one must use a phenomenological method to grasp important aspects of humans as for example freedom, responsibility and guilt.

As we saw towards the end of chapter two, Andersen makes the point about describing humans as moral agents very clear, as he does not think that one can explain ethical actions scientifically and mentions as an example that the biologist describes the action of humans.
rather than understand them. Andersen thinks, that the ability to understand human actions connects to an understanding of human language. This leads us to the point of Hare’s philosophy. By maintaining that ethical assertions are meaningful, Hare argues against the Logical Positivists. Hare wants to show that it is possible to discuss moral questions in a rational way. He examines what universal traits characterise moral statements and which differentiate them from other statements.

As we mentioned, Hare maintains that the language of ethics is prescriptive, i.e. that ethical language consists of prescriptive or action guiding sentences. The prescriptivity is what differentiates moral utterances from other propositions. Prescriptive utterances are closely connected with actions. When passing a moral utterance one commits oneself to carry out the action that is prescribed. If one does not carry out the prescribed action one is guilty of a logical contradiction. Thus the language of ethics shows that human beings are free to prescribe actions; there is no antecedent binding morality. But this freedom is a freedom with limits. Hare shows that what differentiates moral statements from other prescriptive statements is that they are characterised by universalisability. By passing a moral utterance one is obligated to subject oneself to the moral verdict. Hare does not give moral reasons for this claim but logical ones. Rationality is connected to the universalisability of moral statements. As opposed to moral statements Hare views descriptive propositions, which is about empirical matter of fact. If one accepts a descriptive utterance one is obligated to believe it but one is not obligated to act in a certain way. Hare shows that the characterisation of moral utterances as evaluative as opposed to be descriptive is not profound enough. By passing a general evaluative statement as for instance ‘The flower is beautiful’ one is not obligated to act in a special way. Moral statements are evaluative, but what specifically characterises them is their prescriptivity, universalisability and overridingness.

So, Hare shows by his analysis of the language of morals that freedom and rationality are a part of moral argumentation. By this he argues against The Emotivism asserted by Ayer. As we mentioned Ayer thinks that ethical stand is an outburst of feelings and cannot be reasoned, i.e. he excludes reason. Furthermore The Emotivists maintain that one can influence another person’s attitude by expressing a moral statement. Hare argues that one sometimes can influence the other person’s attitude by passing a moral verdict. But purely expressing the moral

---

139 Svend Andersen, 1998*, op. cit., p. 244.
140 For a discussion about what marks moral statements, see Bo Petersson, Forskning och etiska koder. En introduktion till forskningsetik, Sweden: Bokförlaget Nya Doxa, 1994, pp. 59-65.
statement does not do this; influencing the other person’s attitude depends on the circumstances under which the moral verdict is passed. Hare maintains that the function of moral language is to *prescribe* actions; this is done purely by passing the moral verdict. If one says ‘You ought to comfort the child!’ the action is prescribed by expressing the utterance and is not dependent on the circumstances. This shows that it makes sense to argue morally.\(^{141}\)

Løgstrup and Hare reject the scientific way of describing human beings as moral agents. They give an alternative to the deterministic view of human nature. Løgstrup argues that one must use the phenomenological method to grasp important aspects of human existence such as freedom, responsibility and guilt. Hare argues by analysing the language of morals that humans are free, that ethical statements are meaningful and that it makes sense to argue morally. In this way they both reject Hobbes and Sociobiology’s way of describing human beings as moral agents.

### 3. 3. 3. The Golden Rule in a Philosophy of Morality

As has been proposed, I think that the interpretation of the Golden Rule, as a rule on role reversal, as Løgstrup and Hare interpret it, is more adequate than the way Hobbes and Sociobiology view it. This is because Hobbes and Sociobiology by their scientific method do not grasp aspects that are important in connection with the description of human beings as moral agents.

In the rest of this thesis, the starting point will be the Golden Rule as a rule on role reversal, that is to say a rule that demands unselfish actions. The starting point will furthermore be an ethics, which contains two levels, an intuitive and a critical. Spontaneous expressions of life and prima facie rules belong in the intuitive level, while the Golden Rule and other general principles belong in the critical. In the next chapter we will look at what these principles are. The Golden Rule is, for instance used if the situation does not call forth a spontaneous expression of life, or if there is a doubt about what one ought to do. The ethics that is here the starting point is in other words a kind of combination of Hare’s moral philosophical theory and a secular interpretation of Løgstrup’s ethics. In light of the presentation of Hare and Løgstrup’s theories, I am of the opinion that I am able to defend the combination of these theories. One can say that Hare examines the logical structure of ethics and assumes that humans have

\(^{141}\) Jørgen Husted, *op.cit.*, p. 264.
intuitive norms and views of morals, while Løgstrup examines the origins of these norms, i.e. he examines the ontological foundation of ethics.

If the Golden Rule is interpreted as a rule concerning role reversal, it implicitly covers concepts such as appreciation, dignity, sympathy, solidarity, sociality, justice, charity etc. These concepts are to be found in many ethical principles. Wattles writes the following about the concept of dignity:

“The recognition of comparable worth is what gets variously articulated in ethics through the formulation of principles such as the categorical imperative, the principle of utility, and other versions of the idea of moral consistency. The golden rule is the mother of such specific principles”\(^{142}\)

In the next chapter we will take a closer look at some of the principles contained implicitly within the Golden Rule interpreted as a rule on role reversal. But one must be aware that the Golden Rule implies that humans have a certain moral sense.

\(^{142}\) Jeffrey Wattles, \textit{op.cit.}, p. 170.
4. The Golden Rule and the Four Bioethical Principles

The scientific, technological and social development that has taken place in recent decades has resulted in enormous changes within the biological sciences and within the health services as a whole. This development demands that human beings view traditional ethical understanding in relation to this new context. Technological breakthroughs within biomedicine of which one can mention are the first heart-transplants at the end of the 1960s, genetic engineering at the start of the 1970s, and the birth of the first child due to in-vitro fertilisation in 1978. Technological development and the new ethical problems posed have led to the emergence of a new scientific discipline called bioethics. As we mentioned, the concept of bioethics is used in this thesis about the practice of using ethical theories or principles in cases within biotechnology and medical science.

In this chapter, we will present Beauchamp and Childress’ method to throw light upon ethical problems, after which we will discuss points of criticism of the method that have arisen. In the presentation of the points of criticism we will differentiate between the criticism of the actual method and the criticism of the content of the principles. First we will present the criticism of the method that is the balancing of the principles etc., next we will present the criticism of the content of the single principles. According to the Danish physician Henrik R. Wulff the Golden Rule is a moral ideal within the health services in the Nordic countries. Wulff does not think that one can use Beauchamp and Childress’ bioethical principles as a tool for solving ethical problems in the North because they do not correspond to the Golden Rule. So, in this chapter we will examine if Beauchamp and Childress’ bioethical principles correspond to the Golden Rule and analyse whether they can be of use for solving bioethical problems in the North. Concerning this, in the next chapter we will look at how bioethical problems can be solved in a pluralistic society.

4.1. Beauchamp and Childress’ Method

Among bioethicists there are discussions as to whether traditional ethical theories, as for example utilitarianism and Kantianism, are useful instruments for solving ethical problems that stem from biotechnology. It is possible that instead new theories have to be developed simultaneously with the emergence of concrete problems. Bioethics is characterised as applied

---

1 The term biomedicine refers to the use of the results of basic biological research for the treatment of disease [Svend Andersen & Karsten Klint Jensen, op.cit., pp. 11-12].
ethics, i.e. an examination of ethical questions that emerge within actual practice, as for example in biotechnology or medical science. Yet, the description applied ethics can be misleading as it is assumed that there exist some concrete ethical theories that one can apply to concrete problems. Rather what happens is a dialectic between theory and practice. The emergence of new ethical problems results in critical analysis of ethical theories and perhaps a reformulation of the same, which can result in a new view of concrete problems. In this way, the examination of ethical problems is a process and not an application of rigid ethical theories.

4. 1. 1. Ethical Reasoning

Beauchamp and Childress do not think that traditional ethical theories are enough for an analysis of the problems within biomedicine. This is because ethical theories are often too abstract for practical use. Beauchamp and Childress have developed a method one can use to throw light on bioethical problems. In 1979, they wrote the book *Principles of Biomedical Ethics*, which is published in many edited and expanded editions, most recently in 2001. In the first edition of the work, Beauchamp and Childress divide moral judgements etc., into the following hierarchies or levels:

1. Ethical theories
   \[
   \downarrow
   \]

2. Principles
   \[
   \downarrow
   \]

3. Rules
   \[
   \downarrow
   \]

4. Concrete actions and judgements

![Figure 4.1](image_url)

Beauchamp and Childress classify moral judgements, rules, principles and theories hierarchically. The arrows show that ethical theories reason the principles that reason the rules etc. The authors therefore maintain a top-down model.

A moral judgement is a judgement on a concrete action. Beauchamp and Childress think that moral judgements are reasoned according to moral rules, which are reasoned according to principles that finally are defended by an ethical theory. Rules are more dependent on context.

---

than principles\textsuperscript{6}. So in the first editions of *Principles of Biomedical Ethics*, Beauchamp and Childress write that ethical judgements are reasoned deductively from a *top-down model* (see figure 4.1.). One must not confuse this deductive reasoning with a deductive application of the principles themselves. Neither rules nor concrete judgements can be deduced directly from principles. The reason for this is that one needs interpretation, specification and weighing of the principles when one has to judge a specific problem\textsuperscript{7} (see section 4.3.).

### 4.1.2. Prima Facie Binding Principles

As we mentioned, Beauchamp and Childress do not think, that traditional ethical theories are applicable in throwing light on bioethical problems. They think that some forms of utilitarian and deontological theories assert the very same principles. It could, for instance, be the principle of respect for autonomy and the principle of justice. According to Beauchamp and Childress, bioethics can be summarised in the following four primary ethical principles: The principle of respect for autonomy, the principle of nonmaleficence, the principle of beneficence and the principle of justice. Instead of defending a monistic or absolutist theory, as for example utilitarianism and Kantianism, Beauchamp and Childress defend a so-called composite theory. They do not think that some ethical principles rank higher than others. Which principle is set-aside in each individual case depends on the context. Beauchamp and Childress consider these principles *prima facie binding*, i.e. they are binding in any situation if they do not conflict with other prima facie principles. For example, if one discusses whether mercy killing is morally acceptable the principle of nonmaleficence comes into conflict with the principle of beneficence. Then one most consciously decide which prima facie principle one must set aside in the actual situation\textsuperscript{8}.

### 4.1.3. The principles – a Part of a Common Morality

In the first editions of *Principles of Biomedical Ethics*, Beauchamp and Childress held the view that the four bioethical principles can be deduced from different traditional ethical theories. In later editions of the book, the authors emphasise further that the primary principles are a part of a common morality that exists across cultures. Beauchamp and Childress write:

“The present authors do, indeed, understand the common morality in this way: This morality is morally authoritative for the conduct of all persons and it provides the basis for


\textsuperscript{8} Tom L. Beauchamp & James F. Childress, 1989, op.cit., pp. 44-62.
The normative theses and rudimentary moral theory that we develop in this book … Nonetheless, we believe that all persons in all cultures who are serious about moral conduct do accept the demands of the common morality …. We accept the thesis that morality in the community-specific sense reflects significant cultural differences; but we think it is an institutional fact about morality, not merely our view of it, that it contains fundamental precepts. These fundamental precepts alone make it possible for persons to make cross-temporal and cross-cultural judgments and to assert firmly that not all practices in all cultural groups are morally acceptable.

By this, Beauchamp and Childress not only maintain that the principles can be substantiated deductively from ethical theories, but they also think that the principles can be drawn from a common cross-cultural morality. They therefore assert a bottom-up model, in which, from a common morality, one can inductively deduce some primary ethical principles. That means that Beauchamp and Childress both assert a top-down model and a bottom-up model, that the principles can both be reasoned deductively and inductively (see figure 4.2.).

1. Ethical theories
   ↑↓
2. Principles
   ↑↓
3. Rules
   ↑↓
4. Concrete actions and judgements

Figure 4.2. Beauchamp and Childress’ hierarchy used within moral judgements, rules, etc., to show directions of reasoning of the different levels of abstraction after publication of the latest edition of the work Principles of Biomedical Ethics. The arrows point in both directions, as the authors are both asserting a top-down model and a bottom-up model, which means that the principles can be reasoned both deductively and inductively.

4.2. General Criticism of Beauchamp and Childress’ Method

Since the first publication of Principles of Biomedical Ethics, Beauchamp and Childress’ method has been an object of criticism. In this section, we will take a closer look at some of the shortcomings and points for discussion that have been pointed out in connection with Beauchamp and Childress’ theory.

4. 2. 1. Beauchamp and Childress’ Method Stresses Theory in Relation to Practice

Carson Strong and Albert A. Jonsen think that Beauchamp and Childress’ method is deductive, as according to the method one must apply principles to concrete problems, i.e. one must apply the correct principle in real life and in that case the principles do not consider the sphere of the object. Strong writes that according to **principlism**, one can deduce conclusions from premises that contain ethical principles and factual descriptions of problems. Strong thinks that in place of it one should use **practice** as a starting point, the actual problem itself. He asserts a so-called **casuistic theory**, i.e. a method, which plays down the role of ethical theory. The casuistic theory says that one compares the concrete problem with a paradigmatic case that resembles the problem in hand. In these paradigmatic cases, it is reasonably clear which action is ethically justifiable. Therefore, with the help of analogical conclusions one reaches an ethical judgement.

Nancy King and Larry Churchill write that in ethical problems the application of principles has many advantages. The principles result the judgements not resting on intuition alone, and they make one able to cope with different ways of action. The use of principles also has the result that one can justify the judgements one makes. However, King and Churchill do think that the deductive application of principles has the drawback that one focuses on the application of the principles and so forgets or shuts out many other important aspects of making an ethical judgement. Here King and Churchill refer, among others, to the relationships to other subjects and the concept of virtue, which covers motives and cultivation of character.

That means that Beauchamp and Childress’ method is accused of stressing theory rather than practice and over-stressing procedure rather than practical wisdom.

---

10 Carson Strong: Department of Human Values and Ethics, College of Medicine, University of Tennessee, Memphis, USA.
11 Albert A. Jonsen: Emeritus Professor of Medical Ethics, School of Medicine, University of Washington, Seattle, USA.
12 **Principlism** here refers to the practice of applying ethical principles to ethical problems within biomedicine. One should take into consideration that Beauchamp and Childress’ aim in developing their method is to present a tool which can be used in practice and not a coherent ethical theory. One ought not to describe Beauchamp and Childress’ method as an ‘ism’ on the same footing as other ‘isms’ (as for example utilitarianism or Kantianism).
14 Nancy King: Professor of Social Medicine, University of North Carolina School of Medicine, USA.
15 Larry Churchill: Professor, Department of Social Medicine, University of North Carolina, USA.
4. 2. 2. Balancing Principles

Many critics maintain that in the first editions of *Principles of Biomedical Ethics* Beauchamp and Childress lack a rule for how one weighs up principles if they come into collision17.

Holm does not think that Beauchamp and Childress’ method is able to give solid answers to problems of morality. He maintains that via the method one can get precisely the answer one wants. Holm accuses the balancing method of being intuitive and subjective18.

In the third edition of *Principles of Biomedical Ethics* Beauchamp and Childress were aware of the problem of balancing and produced conditions that should be fulfilled in order to allow one prima facie principle to weigh heavier than another. They write:

“The following are all requirements for justified infringements of a prima facie principle or rule:

(1) The moral objective justifying the infringement must have a realistic prospect of achievement;

(2) Infringement of a prima facie principle must be necessary in the circumstances, in the sense that there are no morally preferable alternative actions that could be substituted;

(3) The form of infringement selected must constitute the least infringement possible, commensurate with achieving the primary goal of the action; and

The agent must seek to minimize the effects of the infringement19.

To follow these directions purely by intuition would hardly be possible. As will appear, Beauchamp and Childress sharpen these conditions in the latest edition of their work.

If bioethical principles come into collision, on the face of it, one can apply two methods. Either one can rank the principles in such a way that a principle always weighs heavier than others, or one can maintain that the principles are coordinated and so introduce a form of balancing of the principles. The method of ranking the principles is seen in Rawls. He thinks that the highest-ranking principle of justice must be fulfilled before the lowest ranking principle of justice has any weight20. If, on the other hand, the principles are prima facie binding and therefore coordinated, what should apparently happen is a balancing of the principles. However, Henry S. Richardson21 does not see it as such. He writes that the balancing metaphor within bioethics can and should be exchanged for specification of principles. A specification

---

21 Henry S. Richardson: Department of Philosophy, Georgetown University, Washington, USA.
of a principle is an interpretation of an original abstract principle, which is consistent with the original principle. Richardson describes his theory thus:

“Accordingly, it was important to set out in a relatively precise way in what relation the more specific norm stood to the initial norm, such that we might be licensed in saying that the initial norm is brought to bear when we use the more specific norm. In order to capture this feature, I invoked the semantic condition of *extensional narrowing*: Everything that satisfies the specified norm must also satisfy the initial norm …. Yet to fit the intuitive notion of specification, not every norm that happens to be narrower can count. Accordingly, I added a syntactic condition of *glossing the determinables*. That is, I required that a specification narrow a norm by adding clauses spelling out where, when, why, how, by what means, to whom, or by whom the action is to be done or avoided.”

Thus Richardson invokes a semantic condition of extensional narrowing. That condition is about the content of the more specific norm. An example of keeping the semantic condition could for instance be the following specification of the principle of respect for autonomy: ‘Always respect the patient’s autonomy’. The content of this more specific norm is contained within the initial norm. Furthermore Richardson adds a syntactic condition that means that not every norm that is more specific can count. An example of keeping the syntactic condition could be as follows: ‘Always respect the patient’s autonomy if his wishes are clear and relevant’. In this example we added a subordinate clause, which says that one should not always respect the patient autonomy, only if her/his wishes are clear and relevant. That means that by keeping both conditions the norm gets even more specific. As we will see Beauchamp and Childress include Richardson’s theory concerning specification in their method in the latest edition of *Principles of Biomedical Ethics*.

4.3. Beauchamp and Childress’ Method is More Than Principles

Since the first publication of their work, Beauchamp and Childress have currently taken criticism of their method into consideration. They did that by editing and expanding *Principles of Biomedical Ethics* and simultaneously publishing papers in order to define what their method aims at. In this section, we will look at which modifications have been made of Beauchamp and Childress’ method since the first publications of *Principles of Biomedical Ethics*. In the next section, we will look at whether the authors, in the latest edition of *Principles of Biomedical Ethics*, have moved beyond the points made in criticism to which we have drawn attention in this thesis.

4. 3. 1. An Application of Bioethical Principles Demands Practical Wisdom

Defenders of Beauchamp and Childress’ principlism focus on bioethical principles being practical principles and not theoretical principles like mathematics, for example. Practical principles consist of descriptions of actions. Bioethical principles do not contain detailed instructions about how to live and therefore they do not demand a definite pattern of behaviour. Onora O’Neill\(^\text{23}\) writes that application of bioethical principles demands practical wisdom as the indefinite nature of the principles results in there not being a direct conclusion from a principle as to which action is the ethically right one. Therefore, the principles are only a guide as to how to act and not an algorithm. O’Neill does not think that one should search for a rule on how to apply the principles if they come into collision. This would result in an infinite regress of rules\(^\text{24}\).

King and Churchill point out that the use of principles is compatible with an ethics of virtue, which emphasises practical wisdom and character, they write:

“Researchers frequently appeal to both principles and virtues, as well as to their relationships with subjects, and any full treatment of ethics must make room for these and other approaches. These approaches are usually not competitive but complementary. Principles speak to the more public and rational side of ethics, invoking explicit moral formulas; virtues speak to the more interior aspects of ethics, invoking character, motives and self-definitions.”\(^\text{25}\)

As we mentioned, Strong thinks that the advantage of a casuistic theory over principlism is that it takes its starting point in practice. However, he thinks that principlism can use the casuistic method to draw analogies between paradigmatic cases and the actual problem when principles come into collision. Therefore, he thinks that principlism can be combined with casuistry\(^\text{26}\).

David DeGrazia\(^\text{27}\) has developed a theory he calls specified principlism. He has described the method thus:

“Specified principlism’, as I call this model, has the following features: (1) It has one or more (probably more) general principles ‘at the top’; (2) It employs casuistry but is by no means reducible to it; (3) It allows the drawing and explication of relationships be-

---

\(^{23}\) Onora O’Neill: Professor of Moral Theory, Cambridge University, England.


\(^{25}\) Nancy King & Larry Churchill, op.cit., p. 712.

\(^{26}\) Carson Strong, op.cit., p. 339.

\(^{27}\) David DeGrazia: Department of Philosophy and Health Care Sciences, George Washington University, USA.
between norms of different levels, relationships usually irreducible to ‘derivation’ or ‘enti-

tailment’; and (4) It allows for discursive justification throughout the system".

He thinks that this form of specified principlism corresponds to Beauchamp and Childress’ principlism.

Beauchamp defines his and Childress’ method in the paper *Principlism and Its Alleged Com-

petitors*. In this paper he writes that their method is both compatible with a casuistic theory and with a theory of virtues. He thinks that in bioethical principles there are in-built virtues and that it demands moral character and therefore practical wisdom to use them. Beauchamp writes that a judgement can never be directly deduced from principles, as it demands interpretation, specification and balancing to use the principles when they come into collision. Specification corresponds to Richardson and DeGrazia’s theories. By specification one removes the indefinite in the principles and fills it with “action-guiding content”.

According to Beauchamp and Childress, their method is for illumination of bioethical problems not an unreflective application of rigid principles, but a practice, which demands moral character including practical wisdom and interpretation.

**4. 3. 2. Dialectic Between Levels of Abstraction**

B. Andrew Lustig draws our attention towards the fact that criticisms of principlism are often focused on the principles and not their practical application. One must understand that morality and discourse have various levels of abstraction and one must make clear on which level one is focusing in a critique of a method. Both DeGrazia and Lustig point out that Beauchamp and Childress, already in their third edition of *Principles of Biomedical Ethics*, write that bioethical principles are not rigid, but that their is a dialectic between theory and practice. The principles are indefinite, and do not give fixed guidance for action; they are converted in step with being applied to concrete problems. Conversely, application of bioethical principles throws new light on actual ethical problems.

---

28 David DeGrazia, op.cit., p. 523.
30 B. Andrew Lustig: The Institute of Religion, Texas Medical Centre, Houston and The Centre for Ethics, Medicine, and Public Issues, Baylor College of Medicine, Houston, Texas, USA.
Beauchamp also implies this in his definition of the method. He writes:

“When philosophers now speak, as they often do, about ‘the top’ (principles, theories) and about ‘the bottom’ (cases, individual judgments) in moral philosophy, it is doubtful that these poles can be either a starting point or a resting point without some form of cross-fertilization and mutual development. Childress and I have emphasized this point since the first edition of Principles of Biomedical Ethics by pointing out the dialectical character of moral reasoning.”

Beauchamp and Childress’ method is therefore more oriented towards practice than critics seem to think. Solution of ethical problems within biomedicine is a process that consists of interplay between theory and practice.

4. 4. The Revised Edition of Beauchamp and Childress’ Method

In this section, we will focus on how Beauchamp and Childress revise their method in the fifth edition of Principles of Biomedical Ethics.

4. 4. 1. Practical Reason and Virtues

In the most recent edition of the work, Beauchamp and Childress incorporate ethics of virtues and a casuistic theory into their principlism. This results in the authors meeting the critics on several points.

Beauchamp and Childress write that rights, feelings and virtues, including trustworthy character and a good sense of morality, often mean more than principles in solving ethical problems. In the latest edition of their work, they explicitly state that some specific virtues correspond to certain principles. There are, for example, the following connections:

<table>
<thead>
<tr>
<th>Principles</th>
<th>Corresponding virtues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for Autonomy</td>
<td>Respectfulness</td>
</tr>
<tr>
<td>Nonmaleficence</td>
<td>Nonmalevolence</td>
</tr>
<tr>
<td>Beneficence</td>
<td>Benevolence</td>
</tr>
<tr>
<td>Justice</td>
<td>Justice (or Fairness)</td>
</tr>
</tbody>
</table>

Figure 4. 3. Connections between the four bioethical principles and the corresponding virtues.

Beauchamp and Childress think that one can execute an action that corresponds to a specific principle without the action being virtuous. They draw a distinction between the outer action and the motive behind it. Beauchamp and Childress write: “An action can be right without being virtuous …. but an action can be virtuous only if performed from the right state of mind.” A virtuous person will in any case be better at following the principles than an unvirtuous person as the person would be better at judging which action is ethically correct. This ethics of virtue, which Beauchamp and Childress incorporate, corresponds with Aristotle’s ethics. One has to be aware, that the agreement only concerns the form and not the content of the ethics. Aristotle differentiates between intellectual and moral virtues. Wisdom (sophia) is an intellectual virtue of the theoretical type while practical wisdom (phronesis) is an intellectual virtue of the practical type. Moral virtues imply attitudes and qualities of character that dispose a person to choose actions corresponding to practical reason (phronesis). Action and attitude affect one another. The one who does certain types of moral attitudes, strengthens corresponding types of moral actions and these dispose the character to moral actions in the future. So according to Aristotle, one can practise acting morally, i.e. ethics is a practical business. From this, one can see the close connection between bioethical principles and virtues. By following bioethical principles, one can practise doing ethically correct actions from the right motive. Therefore, the principles can help human beings to act virtuously and so help in the cultivation of certain characteristics. Conversely, a person with practical wisdom (phronesis) would understand the practical use of the principles. It must be noted, as we mentioned, that it is not only in the later edition of *Principles of Biomedical Ethics* that Beauchamp and Childress emphasise the significance of the virtues in connection with ethical problems. However, they incorporate the *ethics of virtues* explicitly as part of *principlism* for the first time in the revised edition of their method.

As has appeared, Beauchamp and Childress emphasise the significance of practice in the most recent edition of *Principles of Biomedical Ethics*. This also shows in their stressing the importance of comparing a concrete problem with ethical problems one has experienced earlier. The authors unite *principlism* with a form of *casuistic theory*. Beauchamp and Childress think that one needs an instrument that is the bioethical principles, in order to identify the morally rele-

vant facts when one has to draw parallels between a concrete problem and a *paradigmatic case*. In this way, *casuistic theory* has become a part of Beauchamp and Childress’ method.

### 4. 4. 2. Balancing, Reflexive Equilibrium and Specification

In the latest edition of *Principles of Biomedical Ethics*, Beauchamp and Childress sharpen the conditions that must be fulfilled in order for one prima facie principle to outweigh another. Among others, they add the following premise: “The agent must act impartially in regard to all affected parties; that is, the agent’s decision must not be influenced by morally irrelevant information about any party”

Beauchamp and Childress introduce the demand that one cannot let self-interest be the driving force when one has to decide which principle has more weight. One could call this a demand of universalisability.

In the most recent edition of the book, the authors stand for a model in which the direction of reasoning is reciprocal. There is not any level of abstraction that has a fundamental epistemological status. A dialectic takes place between theory and practice. If a disagreement occurs, for example, between a specific judgement and a superior principle, then one tries to come past this disagreement by help of analysis and critical examination of both the judgement and the principle. This can result in a redefinition of the content of the principle or a new view of the specific judgement. By such an analysis, one can reach a *reflexive equilibrium* where the specific judgement corresponds to a superior principle. Such equilibrium can only be reached in periods; new problems will emerge demanding a critical analysis of the principles or the rules. This makes the solution of ethical problems a process. The concept of reflexive equilibrium originates from Rawls theory of justice and is also worked through by Norman Daniels. As we mentioned, the introduction of this coherentism results in Beauchamp and Childress advocating neither a purely *top-down model* nor a purely *bottom-up model*, but a model in which the direction of reasoning is reciprocal (see figure 4. 2.).

In the fifth edition of the work, Beauchamp and Childress emphasise that bioethical principles can be specified so that they approach the specific problem. They make Richardson’s theory

---

44 Tom L. Beauchamp & James F. Childress, 2001, *op.cit.*, pp. 398-400. One should take note that this model was introduced already in the 4th edition of the work.
47 The term coherence is here used about a way of thinking or argumentation’s logical or reasonable coherence.
Beauchamp and Childress write that this specification and reflexive equilibrium result in room for debate, compromise, mediation, and negotiation, when the principles are being applied.

We have now examined the general insufficiencies and points of criticism pointed out in the application of Beauchamp and Childress’ ethical principles. As already mentioned the criticism made of Beauchamp and Childress’ first draft of the method is among others that they emphasise theory more than practice and even more that they stress procedure more than practical wisdom. Beauchamp and Childress get beyond these points of criticism by combining principlism with the ethics of virtue and a form of casuistic theory. A criticism is also that the method lacks a rule on how one should balance the principles if they come into collision. This criticism Beauchamp and Childress try to face by introducing an universalisability demand and, furthermore by making Richardson’s theory of specification and the model of reflexive equilibrium a part of their method.

4. 5. Does a Universal Core of Ethics Exist?
As we mentioned, Beauchamp and Childress think that in morality a universal core does exist, which among others is constituted of the four bioethical principles. This claim has though, been a cause of much criticism. In this section we will focus on whether a universal ethics does exist. In this connection, we will examine if bioethical principles can be used to illuminate bioethical problems in a European context. Then we will specifically examine if the ethical principles can be applied in the Nordic countries. In this connection, we will look at Wulff’s argument that the four bioethical principles do not correspond to the Golden Rule and therefore cannot be applied in a Nordic context.

4. 5. 1. Universalism Versus Pluralism
A number of critics of Beauchamp and Childress’ method point out that a common cross-cultural morality does not exist.

---

48 Richardson’s theory is already incorporated into principlism in the 4th edition of Principles of Biomedical Ethics.
H. Tristram Engelhardt Jr. writes:

“The post-modern condition is the recognition of the fundamental limits of the modern moral philosophical project: There is no way to discover either a canonical content-full secular morality or the correct morally content-full solutions to secular moral controversies. As a consequence, individuals meet as moral strangers when they are not bound by the communality of a shared moral vision that binds moral friends. Moral strangers do not see the world in the same way. They do not possess common content-full moral premises so as to resolve concrete moral controversies or agree regarding the nature of true human flourishing.”

Engelhardt thinks that the post-modern condition is a sociological and cultural fact. He further maintains the following: “Terms are embedded in theoretical and value frameworks, which give to them their meaning. The same is the case for the elements of actions in the moral world.” He thinks that the concepts of autonomy, beneficence, nonmaleficence and justice are understood differently in different moral contexts. Engelhardt emphasises that one must share a common understanding, for example, of the concept of justice in order to refer to a principle of justice, when faced with an ethical problem. He does not think that this general understanding exists cross-culturally. Leigh Turner shares this opinion. He thinks that bioethicists are not aware of the heterogeneity that exists between different ethnic, moral and religious traditions. This means that a universal common sense does not exist, to which one can refer in examining bioethical problems. Yet, Turner writes:

“A discussion of this sort also risks exaggerating the significance of cultural, religious, and ethnic differences by suggesting that various local moral worlds can be incommensurable. I suspect, however, that in most instances of social interaction within contemporary clinical settings, at least a beachhead of mutual intelligibility is likely to exist.”

The anthropologist Donald E. Brown writes that evidence does exist that some scientific anthropological conclusions about differences between cultures are exaggerated. He thinks that anthropologists find more relativism than actually exists, because they have a prejudiced

49 H. Tristram Engelhardt Jr.: Centre for Medical Ethics and Health Policy, Baylor College of Medicine, Texas, USA.
54 Leigh Turner: Research Associate, The Hastings Centre, Briarcliff Manor, New York, USA.
56 Leigh Turner, op. cit., p. 132.
57 Donald E. Brown: Anthropologist, Department of Anthropology, University of California, Santa Barbara, USA.
belief that diversity rules between cultures. Robert Kane writes that the Golden Rule is an obvious candidate for a universal moral principle, as it is to be found in many of the world’s religions and therefore moral codes. He also emphasises that the Golden Rule does not presuppose universal values. According to the rule, it is not about pulling one’s own values over the head of the other, on the contrary it is about putting oneself in place of the other and pursuing the values of the other, even if they differ from one’s own. Therefore the universalisability of the Golden Rule and the four bioethical principles cannot be rejected on account of pluralism of values alone.

As this is not a thesis that contains mainly anthropological studies, we will not go into detail about the anthropological researches on whether a universal core does exist in ethics.

4.5.2. The Principles Derived From European Ethical Theories

In the following it will be shown that Beauchamp and Childress’ bioethical principles can be deduced from European ethical theories developed all the way back in the 17th century. This can give us an idea that the considerations concerning human beings as moral agents expressed in the bioethical principles are a part of European morality.

4.5.2.1. The Principle of Respect for Autonomy

The principle of respect for autonomy is closely connected with a principle about respect for human dignity often referred to in bioethical discussions. According to the principle about respect for human dignity any human no matter what her/his characteristics and simply because (s)he is a human has a worth and therefore demands respect. One will be able to find a formulation of the principle in Kant’s ethics. According to Kant, one must not treat humans only as means; they must be treated as ends in themselves. Kant does not think that human life is valuable because it serves a function; on the contrary, it is valuable in itself. If one treats another human being according to one’s own wishes and needs, i.e. overlooking the other’s goals and limiting the freedom of the person in question to act in agreement with these goals, then one treats the other as means and has then overstepped the principle of respecting human dignity or autonomy. This principle is also to be found in John Stuart Mill’s (1806-1873)

---

59 Robert Kane: Professor of Philosophy, University of Texas, Austin, USA.
60 Robert Kane, op.cit., pp. 34-35.
61 Immanuel Kant, op.cit., p. 63.
ethics. He thinks that humans ought to do actions that correspond to the utilitarian principle as long as they do not harm others and as long as they don’t impinge on the freedom of others. Løgstrup writes, as we mentioned previously, that the ethical demand, which human beings confront in the meeting with the other person, must never be about taking over the other’s responsibility. The other must be treated as an independent and responsible being. As shown, the principle of respect for autonomy is part of quite a few ethical theories. Here we presented three very important thinkers, whose philosophies differentiate a lot. Beauchamp and Childress formulate the principle as follows: “Autonomous actions are not to be subjected to controlling constraints by others.” One should remember that the principle of respect for autonomy is only prima facie binding; i.e. it only obligates as long as it does not conflict with other prima facie principles. For example, if an autonomous action will harm others humans, the principle about respect for autonomy is in conflict with the principle of nonmaleficence. Then one must decide which principle has to be set a site.

The principle of respecting autonomy does not count for persons who are not able to act autonomously. Beauchamp and Childress write that these people can be “..immature, incapacitated, ignorant, coerced, or in a position in which they can be exploited by others. Infants, irrationally suicidal individuals, and drug-dependent patients are examples.” The interests of these non-autonomous persons are protected by the principle of beneficence or the principle of nonmaleficence.

One must be aware that the principle of human dignity is not equal the principle of respecting autonomy. My thesis is that the principle of respect for autonomy is part of the principle of human dignity. As has appeared the principle of respecting autonomy does not count for persons who are not able to act autonomously. That is, autonomy is a quantifiable concept; a person can be more or less autonomously. Contrary, the concept of dignity is not a quantifiable concept. Any human, no matter what her/his characteristics are, has worth. It is in regard to dignity that all humans are equal. So, the principle of respect for human dignity contains more than the principle of respecting autonomy. I think that the principle of respecting human dignity must complement Beauchamp and Childress’ principle of respecting autonomy. In chapter six we will argue by the help of an ethical assessment of human gene therapy that it is

67 Tom L. Beauchamp & James F. Childress, 1989, op.cit., p. 73.
reasonable to supplement the principle of respect for autonomy with a principle of human
dignity (see section 6. 2.).

4. 5. 2. 2. The Principle of Nonmaleficence
A version of the principle of nonmaleficence is part of Mill’s philosophy. He thinks that the
human being should realise her/his abilities as long as it does not impinge on the freedom of
others. As we mentioned, this opinion corresponds to the principle of respect for autonomy,
but it also corresponds to the principle of nonmaleficence. The principle of nonmaleficence is
also part of Løgstrup’s ethics. He thinks that in the meeting with the other person the human
being faces an alternative that is whether to take advantage of the power (s)he has over the
other human being for her/his own advantage, or to care for the other person. According to
Løgstrup the ethically correct answer is to further the good of the other person69, i.e. it is not
correct to afflict harm on the other being. Thus I think that the principle of beneficence that is
part of Løgstrups ethics implicitly contains the principle of nonmaleficence (however, Løg-
strups concept of beneficence differentiates from Beauchamp and Childress’ concept of be-
 neficence (see section 4. 5. 2. 3.)). But as we will see the principle of beneficence contains
more than the principle of nonmaleficence.

The principle of nonmaleficence has, among others, the purpose of protecting the interests of
incompetent or non-autonomous persons. As we mentioned, these persons are also protected
by the principle of beneficence. Beauchamp and Childress write that it is difficult to differen-
tiate between the principle of nonmaleficence and the principle of beneficence. They think
that the obligation of not harming others is often more stringent and stronger than the obliga-
tion of doing well to others68. They differentiate between the two principles in the following
way:

“Nonmaleficence
1. One ought not to inflict evil or harm.
Beneficence
2. One ought to prevent evil or harm.
3. One ought to remove evil or harm.
4. One ought to do or promote good”70.

All three points under the principle of beneficence concern certain active actions, contrary to
the principle of nonmaleficence one can remain passive. All it demands is not inflicting harm

68 Ibid.
Beauchamp and Childress understand the word harm to mean: “. . .the thwarting, defeating, or setting back of the interests of one party by the invasive actions of another party.”

4. 5. 2. 3. The Principle of Beneficence

According to Beauchamp and Childress’ theory, it is not only demanded that human beings treat others as autonomous beings and not harm them, it is also demanded that human beings further the good of the other being. The actions that further the good of others belong under the principle of beneficence. There is not a sharp borderline between not harming others and furthering their good. However as we mentioned, the principle of beneficence demands more of the agent than the principle of nonmaleficence does. Beauchamp and Childress write: “In its most general form, the principle of beneficence asserts an obligation to help others further their important and legitimate interests.” They write that the principle of beneficence contains two elements. One of the elements is the obligation actively to further good, and hinder and remove pain. The other element is that it is demanded that one looks at how much an action furthers good in relation to how much harm is involved. Beauchamp and Childress write that the principle “. . .requires a balancing of benefits and harms.” The other element in the principle resembles utilitarian theory, but is not identical to it. The reason being that utilitarian theory is an absolute theory contrary to the principle of beneficence, which is prima facie binding and one principle among other prima facie principles.

Yet, there is a limit to the beneficence that the individual is obligated. Beauchamp and Childress think that there are five demands that must be fulfilled for one to be obligated to further the good of the other. They write:

“X has a determinate obligation of beneficence toward Y if and only if each of the following conditions is satisfied and X is aware of the relevant facts: (1) Y is at risk of significant loss or damage; (2) X’s action is needed (singly or in concert with others) to prevent this loss; (3) X’s action (singly or in concert with others) has a high probability of preventing it; (4) X’s action would not present significant risks, costs, or burdens to X; and (5) the benefit that Y can be expected to gain outweighs any harms, costs or burdens that X is likely to incur.”

72 Ibid.
74 Ibid.
77 Ibid.
Some critics have pointed out that it seems strange that Beauchamp and Childress both operate with a principle of nonmaleficence and a principle of beneficence. The critics ask whether it isn’t enough to have a principle of nonmaleficence, because if one does not harm others then one’s presence must correspond with the principle of beneficence. According to Beauchamp and Childress, this is not the case. In order for an action to belong under the principle of beneficence, one must actively further the good or remove pain. To remain passive and not harm anyone is not enough.

Holm criticises the principle of beneficence as, according to the principle, one is not obligated to sacrifice personal interests. This agrees with the following written by Joseph Fletcher: "The writers of this book seem to want to say that we might have a moral obligation to refrain from injuring others, but none to help them."

What Beauchamp and Childress want to establish by introducing both principles is that one can have an obligation of not harming others, but that one can’t have an obligation of always acting in accordance with the principle of beneficence to all humans all the time. Such an obligation would by unrealisable.

According to Løgstrup, the principle of beneficence is an element in the ethical demand that humans confront in the meeting with the other person. The demand sets an obligation towards humans about caring for the other person’s life, i.e. furthering the good of the other being. However, Løgstrup thinks, just like Beauchamp and Childress, that there is a limit to that beneficence with which one is obligated. Løgstrup writes, as we mentioned, that the radical character of the demand should not be mistaken for limitlessness. One only has responsibility for that part of the other’s life one holds in one’s hand. That means that there is a demand to show beneficence to the people whose lives lie in one’s hand. However, one must be aware that Beauchamp and Childress write that X only has an obligation of furthering the good of the other person if “X’s action would not present significant risks, costs, or burdens to X.”

---

80 Søren Holm, 1995, op.cit., p. 335.
81 Joseph Fletcher: University of Virginia, Charlottesville, Virginia, USA.
This does not correspond to Løgstrups ethics; he thinks that in the meeting with the other person one is always obligated to further the good of the other being.

4. 5. 2. 4. The Principle of Justice

Beauchamp and Childress do not advocate one specific formulation of the principle of justice. First, they analyse the concept of justice and then they present different ways of viewing the principle. Among others, they analyse the egalitarian theory as framed by Rawls. According to this theory, there must be equal access to the advantages any rational being prefers. According to Rawls ‘equal’ does not mean ‘identical amount’. Inequalities might be just, but they are only just if they lead to the best situation for all. For instance some inequalities in income might be just if they cause an increase in production of goods that is to the advantage of all. One can claim that the thought about equal access to goods as Rawls presents it is founded in the principle about human dignity. Beauchamp and Childress are most positive towards this egalitarian theory of justice.

Beauchamp and Childress write the following about the concept of justice: “Justice confers an entitlement whether deserved by the person or not”. What a person is entitled to is based on special moral relevant characteristics, like being productive or being in need. The principle of justice has a big part to play within the health services. It is important to have a principle from which to act, when one has to decide which persons are entitled to which forms of treatment. The theory about justice of distribution is an attempt to establish a connection between a person’s ability or characteristics and the morally correct distribution of goods and burdens in society. Much controversy surrounds what characteristics make some entitled to some and not others.

Beauchamp and Childress favour the so-called Fair Opportunity Rule, which gives guidelines for the distribution of goods. The rule goes as follows:

“The fair opportunity rule .... says that no persons should be granted social benefits on the basis of undeserved advantaging properties (because no persons are responsible for having these properties) and that no persons should be denied social benefits on the ba-

---

86 Svend Andersen, The Right to a Good Death, the paper is in press and will be included in a work published by the Nordic Ecumenical Council.
88 Ibid.
89 Ibid.
For example, this rule of justice ensures that humans that suffer a handicap or a genetic disorder are offered help or treatment. The goal of the rule is that an unequal distribution of goods should not happen because some people have some characteristics for which they are not responsible. According to Beauchamp and Childress, one must though be aware that this rule can bring about a policy of distribution politics that is very different from the one we have today. Beauchamp and Childress let the question about which principle of justice should be used within bioethics remain open.

4. 5. 3. Contemporary European Judicial Culture Reflects the Principles

To examine if it is only on a theoretical level, i.e. in European ethical theories that Beauchamp and Childress’ bioethical principles are to be found we will look at whether the bioethical principles are reflected in actual European judicial culture, that is in practice.

The thought of treating the human being as an end in herself/himself that is to treat her/him as an individual with autonomy, dignity, integrity, etc., exists as part of European countries’ cultures. The democratic constitution is a guarantee for protection of human beings. The protection of the individual has already seen light in The International Human Rights Declaration from 1948, which is based on the dignity of human beings and which should form a foundation for national constitutions. The European human rights declarations from 1950 and on to today all build on the idea of respect for the individual, freedom, democracy and rights, so it can be seen how central the two principles of respect for autonomy and nonmaleficence are in European law. Jacob Dahl Rendtorff and Peter Kemp write:

“The constitutional state developed out of Roman and common law, which contributes to the historical foundations of the principles in order to guarantee the protection of

93 Jacob Dahl Rendtorff & Peter Kemp, Basic Ethical Principles in European Bioethics and Biolaw, Vol. 1: Autonomy, Dignity, Integrity and Vulnerability, Denmark: Centre for Ethics and Law (Copenhagen), 2000, pp. 143-147.
94 Jacob Dahl Rendtorff: Associate Professor, Roskilde University Centre, Denmark.
95 Peter Kemp: Associate Professor, Institute for Philosophy, Pedagogy and Rhetoric, University of Copenhagen, Denmark.
96 These principles do not refer to the ones presented by Beauchamp and Childress. They refer to the following principles presented by Rendtorff: The principle of autonomy, the principle of dignity, the principle of integrity and the principle of vulnerability. Rendtorff maintains that these principles constitute the solid fundament for the protection of humans. He does not think that the principle of respect for autonomy presented by Beauchamp and Childress catch all the dimensions in the protection of humans, which are important in bioethics and biolaw [Jacob Dahl Rendtorff, Basic Principles in Bioethics and Biolaw, paper published in connection with The
freedom, justice, fairness and respect for the common good. The democratic legal order is based on the protection of human beings as ends-in-them-selves, inviolable subjects of law. The ideas of respect for autonomy, dignity, integrity and vulnerability are realisations of this political ideal of the formation and creation of law.

Moreover, in this quotation it appears that the principles of justice and the principle of beneficence play a role in European judicial culture. Beauchamp and Childress’ four bioethical principles are therefore a part of a political ideal made explicit in the formulation of European conventions. As an example of an European convention in which the thought pattern that is presented in Beauchamp and Childress’ bioethical principles is clearly found one can mention *The Council of Europe’s Convention on Human Rights and Biomedicine* from 1996.

Thus Beauchamp and Childress’ four bioethical principles can be deduced from ethical theories formalised by European philosophers back in the 17th century. The bioethical principles are also reflected in contemporary European judicial culture. These considerations lead to the idea that Beauchamp and Childress’ bioethical principles correspond to the opinion about human beings as moral agents, which is important in European culture. Yet, the two Danish physicians, Wulff and Holm maintain that the four bioethical principles can’t be used critically to examine ethical problems in a Nordic context. As we mentioned, Wulff argues that the principles do not correspond to the Golden Rule, which is a moral ideal within the health services in the Nordic countries. In the next section, we will take a closer look at Wulff and Holm’s arguments and examine if the four bioethical principles are contained implicitly within the Golden Rule.

### 4. 5. 4. The Bioethical Principles in a Nordic Context

Critics have pointed out that Beauchamp and Childress’ bioethical principles have appeared out of an American *common sense*, which is not necessarily shared with other cultures. Holm writes:

> “Because the theory of PBE is developed from American common morality (and in reality only from a subset of that morality) it will mirror certain aspects of American society, and may, for this reason alone, be untransferable to other contexts and other societies.”


97 Jacob Dahl Rendtorff & Peter Kemp, *op.cit.*, p. 144.


Holm mentions that Beauchamp and Childress express that a physician in USA has only a limited obligation to his patients. Here Holm sees a contradiction with the duty of the Samaritan physician, which has been the ideal for European physicians for centuries. Holm writes that the principle of beneficence reflects American *common morality*, as there in accordance with this principle is a limit to the beneficence with which one is obligated. As we mentioned, he thinks that it is wrong not to be under obligation to sacrifice personal interests. This is in agreement with Wulff’s theory that from the American tradition one can deduce a morality based on the four bioethical theories in which the principle of respect for autonomy weighs the most while the principles of beneficence and of justice weigh the least. Contrary to this, Wulff thinks that the ethics embedded in the tradition of the Nordic countries is an ethics based on the Golden Rule. He writes that the moral codes that prevail in the North are based on the Golden Rule as formulated in the Bible. According to Wulff, reciprocal duties and a basic minimum of health care for all citizens play a major role in the Nordic countries. It is therefore concepts such as solidarity, beneficence and justice, which are important. This is also supported by anthropological studies. From this Wulff concludes that the four bioethical principles cannot be used in the Nordic countries, because they are arranged such that the principle of respect for autonomy comes first. I think that Wulff and Holm have misunderstood Beauchamp and Childress’ method. The four bioethical principles are defined as being coordinated. Which principle weighs the heaviest depends on the culture to which they are applied. According to Wulff’s theory, the principles of beneficence and justice weigh heavier in the North while the principle of respect for autonomy weighs heavier in the USA. Wulff doesn’t like the kind of weighting in the American society. According to his opinion, one has to emphasise solidarity more. Therefore, it is not Beauchamp and Childress’ theory he criticises but actually the tradition of morality in the USA. In the work *The Samaritan Duty* Wulff criticises the four bioethical principles. As a starting point, he uses the ethical principles


102 One should be aware that Holm is a pupil of Wulff and is therefore very influenced by his way of thinking.

103 By solidarity is meant that citizens have joint responsibility, i.e. that they are not ‘free-riders’.


as formulated in the Appleton Report from 1988\textsuperscript{108}. Wulff writes that the formulation of the principles shows that one can talk of a weighted order, where the principle of respect for autonomy comes first, then the principle of nonmaleficence, the principle of beneficence and finally the principle of justice\textsuperscript{109}. I wonder why Wulff doesn’t use the primary text as a starting point because there the principles are defined as being coordinated. In the Appleton Report, the principles have been interpreted according to the environment in which they will be used and therefore have been weighted. Wulff specifically criticises the principle of respect for autonomy. He writes that the formulation of this principle lacks stressing that the right to autonomy must be limited by humans’ fulfilment of positive duties towards others\textsuperscript{110}. When judging Beauchamp and Childress’ method one cannot look at one singular principle in isolation. The aspect that Wulff seeks from the principle of respect for autonomy is contained within the principle of beneficence. Wulff also specifically criticises the principle of beneficence. He writes that it concerns a one-sided obligation, that it is up to the individual to what extent (s)he will help others\textsuperscript{111}. In this connection, one must note that the principle of beneficence does demand that one must actively further the good and hinder or remove pain. Furthermore, Wulff writes that the principle of justice is not especially informative, as nothing is written about what is to be understood by just treatment of others. He maintains that the interpretation of this principle depends on individual points of view, i.e. on one’s discretion\textsuperscript{112}. If one reads the primary text, then the principle of justice contains an egalitarian formulation of the principle and The Fair Opportunity Rule. This means that one cannot interpret the principle freely. Wulff concludes that Beauchamp and Childress paint a picture of an ideal for society in which the freedom of the individual is placed very high and where one only feels morally responsible for each other in a limited way, and thus accepts the existence of need and social injustice\textsuperscript{113}. Here it appears yet again that Wulff mixes up the definition and the application of the bioethical principles.

To take a closer look at Wulff’s argument that the four bioethical principles cannot be applied in the North because they are ranked and therefore do not correspond with the Golden Rule, one has to focus on the definition of the principles. We will take a closer look in what follows.

\textsuperscript{109} Henrik R. Wulff, 1995, op.cit., pp. 74-75.
\textsuperscript{110} Henrik R. Wulff, 1995, op.cit., pp. 75-76.
\textsuperscript{111} Henrik R. Wulff, 1995, op.cit., p. 76.
\textsuperscript{112} Ibid.
\textsuperscript{113} Ibid.
at whether the definition of the principles corresponds to the Golden Rule. If it does, then a basis for claiming that the principles can also be applied in the Nordic countries does exist.

4. 5. 5. Which Ethical Principles are Implicit in the Golden Rule?
As we mentioned, we have taken as a starting point the Golden Rule as a rule on role reversal as interpreted by Hare and Løgstrup. First of all the Golden Rule is a rule about how the individual should act towards others. Andersen writes that the rule emphasises the individual as a responsible ethical subject: ‘What you will .... you shall.’ In other words, the Golden Rule is an imperative that contains the formulation ‘you shall’. The rule then implicitly contains a principle about autonomy (self-determination). Apart from that, the rule contains a concept of identity. According to the Golden Rule, the individual must do to others, as (s)he expects them to do to herself/himself. The rule demands that one does not consider one’s self-interest. The other person is positioned as equal to oneself, i.e. the identity concept of the rule presupposes equality with regards to worth and importance. These elements are also to be found in Beauchamp and Childress’ theory. In the fifth edition of their work, they introduce the demand of universalisability, furthermore the principle concerning respect for autonomy is part of the principle of human worth, even though the principle of human worth contains more than the principle of respecting autonomy (see section 4. 5. 2. 1.). If one takes as starting point interdependence’s structure of expectation, then there is no doubt that the individual expects consideration, acknowledgement, support, and help, etc. The Golden Rule demands general good-doing. Beauchamp and Childress’ principle of beneficence corresponds to this. Because the Golden Rule contains the principle of beneficence it indirectly contains the obligation of not harming, which is actually one of the four bioethical principles. As we mentioned the principle of beneficence demands more of the agent than the principle of nonmaleficence. One can say that the principle of nonmaleficence is part of the principle of beneficence, but not the other way around (see section 4. 5. 2. 2.). As Beauchamp and Childress’ method the ethics of the Golden Rule contains a plurality of various basic principles. Andersen thinks that the principles are coherent because the Golden Rule is an expression of the actual concrete interpersonal. An ethics based on the Golden Rule and, thereby the four bioethical principles rises above a weakness which many of the monistic ethical theories have, that is to say, emphasis on a single principle.

---

Wattles writes that the formulation ‘do unto others’ in the Golden Rule sets the scene for the transformation of the rule into the ethical levels of society. In Løgstrup’s own words, the Golden Rule can be “devalued to society’s usage.” Andersen writes:

“The ethics of the Golden Rule implies ..., a continuity between the interpersonal and the socio-political spheres. It seems to me that this is one of the stronger points as only if there is this continuity, there is a possibility for organisation of institutions and society to present itself to the individual citizen with an ethical legitimacy.”

Andersen also writes that an ethics of society in agreement with the Golden Rule and therefore the thought of neighbourly love, must be an ethics which recognises some latitude for the individual and which is in a sense liberal, i.e. that the principle of respect for autonomy has a part to play. Andersen thinks that ethics should emphasise the principle of beneficence and the thought of equal worth. This leads to a demand for just distribution. He thinks that an egalitarian principle of justice, as formalised by Rawls, will live up to such a demand. It is exactly this formulation of the principle of justice that Beauchamp and Childress are most in favour of. It is not only Andersen that maintains that the Golden Rule implicitly covers concepts such as appreciation, dignity, solidarity, justice etc. As we mentioned in chapter three Wattles also claims this (see section 3.3.5.). All in all if one sticks to an egalitarian formulation of the principle of justice then the four bioethical principles are implicitly a part of an ethics built on the Golden Rule and the thought of neighbourly love. Andersen writes that this ethics “will be a Lutheran ethics precisely in that it builds on the Golden Rule as the ‘natural’ secular version of the commandment of neighbourly love.” From this I think that the bioethical principles can be used in a Nordic context as they do correspond to the Golden Rule, which is a moral ideal within the health services in the Nordic countries, according to Wulff.

I argue that the Golden Rule can be viewed as a fundamental ethical principle across cultures and that Beauchamp and Childress’ four bioethical principles correspond to the Golden Rule. That is I think there is a reason to maintain that the bioethical principles can be of use for solving bioethical problems across cultures. Because I argue that the Golden Rule is a universal principle I question Wulff’s claim that the Golden Rule is a moral ideal within the health services only in the Nordic countries and not in the US. I think that one should differentiate between the different aspects of the Golden Rule. As we have seen the Golden Rule is very

---

119 Svend Andersen, 1994, op.cit., p. 144.
120 Jeffrey Wattles, op.cit., pp. 165-181.
121 Svend Andersen, op.cit., p. 144. (My translation).
flexible, it contains many ethical principles. I argue that the principle of beneficence and justice maybe weigh heavier in the North while the principle of respect for autonomy maybe weighs heavier in the USA. But this does not mean that the American moral tradition is not founded on the Golden Rule. Which principle weighs the heaviest depends on the culture to which the Golden Rule is applied. In this way I am able to claim, that there are some specific concepts such as solidarity, beneficence and justice that play a major role in the North and at the same time that there exists a universal ethics. One can then question whether there really exists this specific Nordic mentality. Unfortunately I can not go into depth with that question in this thesis. The point is that one can claim that there exists a universal ethics and at the same time that there is a specific mentality in a specific culture.
5. Bioethics in a Pluralistic Society

The first aim of this thesis is to analyse and discuss how the Golden Rule can be understood. First, we showed that the Golden Rule is to be found in many of the worlds’ religions and is also reflected in secular society. The rule can for example be found in a political version in legal declarations (see section 1.). Next, we looked at the Golden Rule from a non-religious point of view. We have gone into detail about the understanding of the Golden Rule interpreted as 1) A rule for the fulfilment of self-interest and as 2) A rule concerning role reversal. It has appeared that the interpretation of the Golden Rule as a rule on role reversal is the most adequate for the description of humans as moral agents. This is because the interpretation of the Golden Rule as a rule concerning role reversal is based on a view of human nature that emphasises humans’ reason, motives, freedom and responsibility. As a starting point, we therefore used this understanding of the Golden Rule in order to examine whether the four bioethical principles correspond to the Golden Rule. This is part of the second aim of the thesis. The conclusion is that one can argue that the four bioethical principles are implicit within the rule. Much in the analysis and discussion of the Golden Rule and the four bioethical principles indicates that the principles of the Golden Rule are basic ethical principles across cultures, i.e. that much indicates that a universal core to ethics does exist. This is concluded in light of the fact that the four bioethical principles surely can be deduced from many an ethical theory, that they are reflected in contemporary judicial culture and that they are a part of the Golden Rule. Thus as mentioned I argue that the Golden Rule can be viewed as a fundamental ethical principle across cultures and that Beauchamp and Childress’ four bioethical principles correspond to the Golden Rule. That is I think there is a reason to maintain that the bioethical principles can be of use for solving bioethical problems across cultures. First of all this shows that the bioethical principles don’t presuppose a special religious or metaphysical base. Furthermore, it shows that there are arguments that support the validity of the thought of lex naturalis. So, I claim that the Golden Rule and other general principles can be of use if the situation does not call forth a spontaneous expression of life, or if there is a doubt about what one ought to do. Kees Van Kooten Niekerk\(^1\) points out that there may well be problems in reaching a consensus when weighing up the principles. He mentions as an example, that pronounced differences exist between Christian and general bioethics in relation to concrete judgements within the Nordic countries. On the face of it, this statement maintains that a *universal bioethics* does not exist\(^2\). When applying bioethical principles, which are

---

1 Kees Van Kooten Niekerk: Associate Professor at the Centre for Bioethics, Aarhus University, Denmark.
defined as coordinated, one decides in the concrete situation what principle has to be set aside. By weighing up the principles, one’s view of humanity and view of life in general will come into play. One could maintain that the view of life would count so much that one would not be able to reach a consensus, because one weighs up the principles differently. This objection agrees with Niekerk’s statement. Yet, one must differentiate between the private and the judicial. As an example, the individual is able to accept that others have access to free abortion even if that person does not want to use it. (Some sociological research in the Nordic countries shows that a common value-community does exist. This seems to say that at least here one can reach agreement in discussions on bioethics)

I would like to end this chapter with a quote from Wattles:

“Confronting the problems of modern civilization, superficial thinking looks for a panacea. A simple word of wisdom, however, cannot help with a complex problem unless its simplicity express a life that comes with a universal network of truths. The more deeply the golden rule is grasped, the less it seems an easy answer. But those who learn to practice it fully, conjoining material sympathy with moral reason under the guidance of spiritual love, will point the way toward a brighter future. ‘Do to others as you want others to do to you’ is a part of our planet’s common language, shared by persons with differing but overlapping concepts of morality. Only a principle so flexible can serve as a moral ladder for all humankind”.

---

3 Sociological research shows that at the orientation of the Scandinavians is less authoritarian than that of the rest of Western Europe, while, at the same time, they stress law and order more. Ole Riis writes: “On one hand, there exists a strong indication for freedom, independence, joint influence, etc. - and just as strong indication for order, security, safety, public morality, on the other. This can possibly be explained by a special point of view as to the relationship between the individual and society. Law-and-order in many societies is associated with a relationship to authority. But the Scandinavians are sceptical towards authorities, and at the same time they want law-and-order. This may be explained thus; that law-and-order in Scandinavia is associated with ‘freedom with responsibility’” [Ole Riis, Findes der et Nordisk verdifællesskab?, in Värdegemenskap i ett mängkulturellt samhälle, (edited by Göran Bexell), Lund: Lund University Press, 1998, p. 41].

4 Jeffrey Wattles, op.cit., p. 189.
6. The Ethics of Gene Therapy – an Application of the Four Bioethical Principles

In preceding chapters we looked at the foundation of bioethics. We have argued that Beauchamp and Childress’ bioethical principles can be derived from the Golden Rule, which can be viewed as a fundamental, cross-cultural ethical principle. In this way we have argued that the bioethical principles can be of use to solve bioethical problems across cultures. In this chapter we will look at how one can apply Beauchamp and Childress’ bioethical principles in practice. As example of an application of the four bioethical principles we will make an ethical assessment of somatic gene therapy, which is a non-established form of treatment.

6.1. What is Gene Therapy?

Over the last twenty years a revolution has taken place within molecular biology. The mapping and partly sequencing of the human genome called the Human Genome Project gives us enormous, previously unavailable knowledge about humans’ genetic makeup. The most important biological parts of the genetic makeup can be described down to the sequence of amino acids. The description of the structure of genes gives an added understanding of their function, including their regulation in certain tissues. The information about human genetic makeup can be used to find new genes, which can be used in connection with gene therapy.

Gene therapy is a method in which one introduces genetic material into an individual’s cells. One differentiates between somatic gene therapy in which genetic material is introduced into somatic cells and gene therapy on germ line cells, in which the genes introduced into the cells can be passed on to following generations. By using gene therapy on germ line cells one makes some decisions for the next generations the consequences of which one does not know. This technology is not allowed in the Nordic countries. Yet one does not need to make use of gene therapy on germ line cells. Instead one can screen and select healthy eggs and sperm cells. This technology is also somewhat cheaper than gene therapy. In this thesis we will focus on gene therapy on somatic cells, as it is the only form of gene therapy that, until today, has fully cured humans and because this form of treatment is permitted in the North. At present, somatic gene therapy directs itself towards states of disease. One wishes to introduce foreign

---

2 In 1996 the European Council agreed to The Convention on Human Rights and Biomedicine. This is a convention for the protection of Human Rights and the dignity of humans with regard to the application of biology and
genes into an individual in order to treat a genetic disorder. However, gene therapy is not an established and fully functional form of treatment. Only a very few trials with gene therapy on humans are at a stage where the effect can be evaluated. In 2001, there were six hundred protocols taking place within gene therapy, while in the last twelve years there have been two actual success stories (see appendix A). In these two cases, which we will look at in the following, one has been able to observe the effects of treatment by somatic gene therapy. This shows that the success-rate in research into gene therapy is not very high. Today, even if one focuses on gene therapy as means of treatment, purely theoretically it can become possible to treat humans for conditions or characteristics lying within the statistically normal area. If that should become an actuality it would be necessary to take a stand in relationship to this technology.

In the following we will look at how the first treatment by means of gene therapy of humans was done. Then we will describe some of the molecular biological techniques one can use to perform gene therapy. In this connection we will assess the application of somatic gene therapy in relation to traditional forms of treatment.

6. 1. 1. The First Treatment With Gene Therapy of Humans

In September 1990, the first official treatment using somatic gene therapy on humans began. The aim of the gene therapy was the treatment of the genetic disorder called Adenosine Deaminase (ADA) Deficient Severe Combined Immunodeficiency Disease (SCID). A deficiency of the enzyme ADA due to a fault in a gene expressed in the bone marrow stem cells causes this disease. These cells live long and divide into various types of blood cells including the T and B cells that fight infections. If one suffers from this disorder, the ADA gene in these cells is not expressed correctly. The result is that the cells cannot produce the enzyme ADA that normally metabolises the substance deoxyadenosine. If ADA is not produced, a toxic level of deoxyadenosine increases in the cell. T cells cannot function normally under these toxic conditions. That means that the patient’s immune defence is reduced, and therefore they risk dying from infections before the age of one. If one does not carry out gene therapy on these patients, their only hope of treatment is bone marrow transplant. However, it is very
difficult to find suitable donors for such a transplant. In a gene therapy trial, T cells from a four-year-old girl were retrieved and cultivated in vitro, after which functioning ADA genes were transferred to the T cells by the help of a retrovirus as vector. The changed T cells were led back into the patient’s blood. Together with the gene therapy, the substance polyethyleneglycol-ADA (PEG-ADA), a version of the ADA enzyme, was administered as a medication. Before gene therapy, the girl lived in isolation from the surrounding world to avoid infection. After the gene therapy and supplementary PEG-ADA treatment, she was able to go to a public day-care centre without being sick more often than other children. On the face of it, it could be difficult to determine if it was the gene therapy or the PEG-ADA treatment that helped the patient

Some Italian researchers threw light on this problem in 1995 by treating two patients, both receiving PEG-ADA treatment from the age of two. The PEG-ADA treatment was not enough to raise their immune systems to a level that did not expose them to life-threatening infections. Afterwards, the patients received gene therapy (modified bone marrow cells and T cells were implanted) simultaneously with PEG-ADA treatment. Two and a half to three years after the gene therapy both patients are doing well, yet the modified T cells do die after having been in the patient’s blood for six to twelve months, while the genetically modified bone marrow cells are producing T cells, which express ADA. This could point towards the gene therapy having a positive effect in relation to the treatment of ADA deficiency. Yet it is not unequivocal, as the patients still receive PEG-ADA treatment. The PEG-ADA treatment is not stopped, as this would put the patient at risk. In later trials it has been found that the reason for the modified T cells dying some months after the transference could be because of administering PEG-ADA. As trials with bone marrow transplantation had shown that healthy T cells have a growth advantage compared to the patient’s own T cells, the researchers also thought that transformed T cells would have a potential growth advantage. But the experiment indicates that administering PEG-ADA counteracts this growth advantage, and therefore the modified T cells die after 6-12 months. Furthermore, it has shown that some patients develop antibodies against PEG-ADA, and that the enzymes therefore break down. In 1998, a trial on mice showed that transformed white blood cells have a selective advantage compared to ADA deficient patients’ own cells. So this could mean that gene therapy without PEG-ADA treatment would someday be able to help

8 P. M. Hoogerbrugge et al., op.cit., pp. 553-558.
ment would someday be able to help patients. In 1998, some American researchers tried to discontinue the parallel PEG-ADA treatment in a patient. This resulted in a drop in the number of B-lymphocytes and NK (natural killer) cells. The production and the survival of these cell types are therefore either directly or indirectly dependent on exogenous ADA addition. Improvement of the method is a must before gene therapy alone can cure ADA deficient SCID.

6.1.2. Forms of Gene Therapy

By gene therapy is meant a method for the introduction of foreign genes into an individual’s cells. This can be done by transferring DNA to the target cell. When one transfers DNA to a cell one must be sure that the DNA reaches the cell nucleus where the transcription of mRNA, i.e. the formation of mRNA from the DNA, happens (see figure 6.1.). When DNA has been transcribed to mRNA, the mRNA is transported out of the cell nucleus to the cell’s cytoplasm. Here it is translated, i.e. translated into proteins, by the ribosomes.

![Figure 6.1: The transfer of information from DNA to protein](image)

Figure 6.1. The transfer of information from DNA to protein. The transfer proceeds by means of an RNA intermediate called messenger RNA (mRNA). In eucaryotes the coding regions of the DNA (the exons, shown in colour) are separated by noncoding regions (the introns). As indicated, these introns must be removed by an enzymatically catalysed RNA-splicing reaction to form the mRNA.

---

One can divide gene therapy into several different categories, depending on the role the new gene must play in the cell and depending on what kind of disease the patient suffers from. Gene therapy can be divided into the following classes: Addition therapy, replacement therapy and blocking therapy.

**Addition Therapy**
This type of gene therapy is used for treatment of hereditary diseases, in which the individual is not able to produce a certain enzyme. By means of addition therapy the patient gets the ability to produce the enzyme through transference of the gene to some of her/his cells. One can treat the patient systematically, i.e. all the body’s organs are treated simultaneously via the blood stream by removing and modifying some of the patient’s cells. One could for example transduce white blood cells and then reinstate them into the patient. As addition therapy is about cells becoming able to express a protein that they previously were unable to produce, the risk is that the patient’s immune defence react to the foreign proteins by creating antibodies against them, and that the proteins therefore break down. It is this form of gene therapy that is used on patients who suffer from ADA deficiency. As we previously mentioned, in these trials the formation of antibodies against PEG-ADA has been observed. These antibodies could just as easily have been formed against ADA, which is encoded by transferred genes.

**Replacement Therapy**
Replacement therapy is a lot like addition therapy, the difference lying in that replacement therapy is about the production of proteins that the individual has been able to produce, but where the ability has been lost. Then one introduces a functioning gene to replace the non-functioning gene in the patient. The loss of the ability to produce a certain protein can be because of a somatic mutation that has the result that some specific gene no longer functions. The new gene makes the patient able to produce the protein lacking. As the body was previously exposed to the created proteins, there is no risk of immunological reactions in replacement therapy.
Blocking Therapy

In some diseases an overproduction of certain proteins takes place. Therefore one wants to stop their synthesis. This problem can be solved both on the transcription level and the translation level. Anyhow it is difficult to reduce the transcription of certain genes, as genes can be regulated by base sequences located several thousand bases away, or by completely different genes placed on other chromosomes. Therefore one often chooses to block the expression of certain genes completely. This is done on the translation level by methods called antisense techniques. For example, one introduces RNA-strings complementary to the gene(s) one wishes to block. The complementary RNA-strings basepair with mRNA and so hinder translation, i.e. they stop the synthesis of the proteins that were over-produced before. Yet the double-stranded RNA is broken down quickly in the cell. For instance, blocking therapy can be used if a mutation happens resulting in the production of a harmful protein. Then the gene that codes for the harmful protein is blocked by the help of antisense techniques (see section 6.1.7.).

6.1.3. Gene Transfer

Many different methods exist for transference of genes into cells. In this thesis we will focus on transference of genes by the use of retroviral vectors, as it is this form of gene transference that is often used in gene therapy research (see appendix B). Vectors based upon retroviruses were the first to be taken up in clinical trials. Since then vectors based upon other animal viruses, such as adenoviruses, adeno-associated viruses, herpes viruses and vaccinia viruses, as well as non-viral vectors have been developed and used in clinical protocols.

Transfer of Genes by Help of Vectors

A vector is a biochemical construction whereby one can transfer DNA or RNA to a cell. One generally differentiates between viral and nonviral vectors. By using viral vectors, DNA or RNA is transferred packed into a viral envelope. While nonviral vectors either do not contain viral components at all or the virus has DNA or RNA bound to their exteriors.

---

13 Lodish et al., op.cit., p. 442.
There are various ways in which cells take up vectors. One of them is called receptor-mediated endocytosis, where the vector binds to a receptor on the cell surface. This results in a signal and thereby a cascade of reactions, which leads to the cell membrane enveloping the vector and absorbing it into the cell. It is this form of vector absorption that happens when one uses liposomes and adenoviral vectors for gene transfer. If gene therapy demands that the gene be absorbed into a certain cell type, it is an advantage to make use of the method involving receptor recognition. When a vector is to be absorbed into a cell, a fusion of the vector and the cell membrane can also happen. It is thought that it is this form of absorption that happens in the usage of retroviral vectors. This can most possibly be explained by the fatty membranes, such as both the cell membrane’s and retrovirus’ outer envelopes having a tendency to fuse.

**Gene Transfer by Viral Vectors**

One often chooses to use viruses as vectors, because by this means one can attain highly efficient gene transfer. Viruses naturally have the ability to be taken up into the cells. Yet they do not encode all the enzymes themselves that they have to use. Therefore they make use of the protein synthesis of the host cells. Viruses are either composed of RNA (e.g. the retrovirus) or DNA (e.g. the adenovirus) and, furthermore, a structural protein and possibly a lipid envelope. The choice of what kind of viral vector to use depends on what disease one wishes to treat with gene therapy. For example, retroviral vectors integrate into the human genome; with the result that one attains a stable expression. Instead, if one wants a short-lived expression, one should use an adenoviral vector, as it does not integrate into the host cell’s genome.

**Retroviral Vectors**

As mentioned, retroviral vectors are used in by far the most cases to transfer genes into mammal cells. Retroviruses contain RNA, which among other things encodes for the enzyme reverse transcriptase (RT) (see figure 6. 2.).

15 Bruce Alberts et al., op.cit. chapter 15.
Figure 6.2. Retroviral particle and genome structure. (a) Retrovirus particle showing the approximate location of its components using the standardized two-letter nomenclature for retroviral proteins. (b) Genome organization and gene expression pattern of a simple retrovirus.

The retrovirus’ RNA is encapsulated in a capsid (CA). On the surface of this capsid is a bilipid envelope membrane that contains viral surface binding glycoproteins (SU), which are recognised by the cell receptors during infection. The retrovirus is absorbed by the cell (viral entry) by endocytosis and a receptor mediated fusion of the cell membrane and the viral envelope. This is followed by internalisation of the core of the particle into the cytoplasm (see figure 6.3.).

The viral RNA is reverse transcribed into DNA (proviral DNA) in the cytoplasm. This proviral DNA is transported to the cell nucleus and integrates randomly into the cell’s genome. Then the proviral DNA is transcribed by the cell’s proteins into RNA, which is either packaged into new virus particles or encodes viral proteins (see figure 6.3.). Among other things, the retrovirus contains the following genes, which encode for viral proteins; the gag-gene, the env-gene and the pol-gene (see figure 6.2.). The gag-gene encodes a polyprotein, which is eventually cleaved to yield core proteins of the virus particle. That means that the proteins encoded by the gag-gene fuse into new capsids. Three gag-encoded proteins found in all retroviruses are the matrix protein (MA), the capsid protein (CA) and the nucleoprotein (NC). MA has been found to be the gag-protein in closest association with the membrane. The CA forms the core shell, i.e. the major internal structure of the virion. NC is a basic protein known to have RNA binding properties. The env-gene encodes proteins of the viral envelope, the surface glycoprotein (SU) and the transmembrane (glyco) protein TM. The proteins encoded by the env-gene are converted into glycoproteins and integrated into the cell membrane (see figure 6.3.). This results in the new virus particles that are released from the cell by help of exocytosis containing glycoproteins on the surface. Enzymes needed for viral replication, i.e.
reverse transcriptase (RT) and integrase (IN) (which integrates the proviral DNA into the host genome) are encoded by the pol-gene. The proteins encoded by the pol-gene are within the cell’s cytoplasm together with proteins encoded by the gag-gene; all these proteins are packed together with the full length RNA in the new capsid, which moves to places in the plasma membrane where the viral glycoproteins are incorporated. Here the capsid is released by exocytosis and is thereby converted into new virus particles (maturation).

Figure 6.4. Gene transfer by a two-component retroviral vector system. A packaging cell line has been generated by stable insertion of packaging construct DNA by a nonviral method such as transfection. Transfer vector DNA is introduced into the packaging cells. The transfer vector RNA is packaging competent while the packaging construct RNAs are defective for incorporation into viral particles. Viral particles harbouring transfer vector RNA are used for transduction of target cells. Subsequently target cells producing the desired transfer vector-encoded RNA and protein may be identified and expanded. (Gene 1 and gene 2 are the therapeutic genes and prom is an internal promoter)

One can make a retroviral vector by removal of the gag-, env-, and pol-genes from a retrovirus (see figure 6.4.). That means that one deletes the genes encoding structural proteins of the virion core (gag), proteins of the virion envelope (env), and enzymatic proteins of the virion needed for replication (pol). This results in the virus being unable to divide, and so unable to replicate in the cell. The potentially therapeutic genes replace the gag-, env- and pol-genes.

17 F. Skou Pedersen & M. Duch, 2001b, op.cit., p. 3.
19 F. Skou Pedersen & M. Duch, 2001b, op.cit., p. 3.
One retains the virus’ LTR-regions (long terminal repeats) containing the retrovirus’ regulatory regions. Then one lets the therapeutic genes be regulated by the proviral DNA (if several therapeutic genes are inserted, one may insert internal promoters to regulate some of the therapeutic genes). When one also retains the retrovirus’ $\psi$-region necessary to package the RNA then one can form a recombinant retroviral vector, which can infect the host cell and integrate the foreign genes into the cell genome. As mentioned, a recombinant retroviral vector cannot be replicated in the cell as it lacks the gag-, env- and pol-gene. To replicate the vector needs a helping-DNA-construct encoding the gag-, env- and pol- genes. This helping-DNA-construct is stable inserted into so-called packaging cells. It is the only type of cell in which the recombinant virus can be replicated. In this way one avoids the retrovirus replicating in the cell infected by the recombinant retroviral vector, i.e. it is for safety reasons that one is using packaging cells. This system is called a two-component retroviral vector system.

The advantage of the retrovirus incorporating its genetic matter into the cell’s genome is that one can obtain a steady expression of the therapeutic genes, because the daughter cells also contain the foreign genes. But it could also be a disadvantage as the foreign genes can disrupt the expression of important genes. The proviral DNA can be inserted on top of a tumour-suppresser gene, and the cell can then divide unrestrained. The virus can also be incorporated near a proto-oncogen, which can activate the gene. In both cases the cell is changed into a cancer cell. Most often though, retrovirus genomic material is inserted into non-coding regions, which make up the greater part of the human genome. However in humans, no form of cancer has been directly associated with integration of replication-defective retroviral vectors. Yet, a method does exist, called targeted gene replacement, which can reduce the risk by inserting genes (unfortunately we are unable to describe the method further in this thesis). Moreover a very small risk exists of retroviral vectors recombining with unknown virus-DNA sequences in cells. Then the vectors could become infectious. Most of the retroviruses are only able to incorporate their DNA into dividing cells, which means that, for example, transformation efficiency cannot be suspected to be all that high in nerve tissue.

---

6.1.4. Human Severe Combined Immunodeficiency (SCID)-X1 Disease

Instead of listing diseases that might be treatable in the future with gene therapy, we will mention the only disease that, until 2002, has been completely cured by gene therapy, that is SCID-X1. Just as ADA deficiency, this disease belongs to the heterogeneous group of diseases SCID. It is an X-bound hereditary disease whose symptoms are that the patient has reduced immune defense. This is caused by a blockage in the differentiation of T and NK lymphocytes, which results in the patient’s blood having a low content of T and NK cells. They also have defective B cells even if the count is normal. The blockage is caused by a mutation in the gene encoding a part of the cytokine receptor, namely the $\gamma_c$ cytokine receptor sub-unit. Cytokine receptors participate in the delivery of growth-, survival- and differentiation signals at preliminary states of the lymphocytes. It was first believed that it was only the interleukin-2 receptor that contains the $\gamma$ chain. However, it turned out that the following receptors also contain it: The IL-4 receptor, which is the receptor for a factor furthering B cell growth, the IL-7 receptor, which is a receptor for a factor responsible for T cell development and the IL-9/IL-15 receptors, which are receptors for a factor furthering T cell growth. The discovery that the $\gamma$ chain is repeated in all these receptors could explain why the mutation affects all the aforementioned cell types. SCID-X1 is deadly if the patient does not receive a bone marrow transplant. Such a transplant could save most of those suffering from this disease. Yet the mutation is not located precisely at the same place in all those suffering from SCID-X1; the $\gamma$ chain can be more or less affected. Even after a bone marrow transplant some patients have defective B cells, as the transplant does not normally transfer B cells. Then the patients must have gamma globulin administered for the rest of their lives.

In 1999, gene therapy was used for two patients of 8 and 11 months old, who were suffering from SCID-X1. A retrovirus vector transferred a gene encoding the $\gamma_c$ cytokine receptor sub-unit to preliminary stages for T cells. Just as in the attempt with ADA deficiency, addition therapy was performed on the two patients; i.e. a foreign gene was introduced encoding an enzyme that the patients had been unable to produce. After ten months, one was able to observe T and NK cells expressing the transgene. The numbers of T, B and NK cells, their functions and antigen specific responses were normal, i.e. it could be observed that the two patients’ immune defences were on level with those of children of the same age. Ten months after the gene therapy, the children were without side effects and developed normally. The conclusion of this trial is that gene therapy can completely cure SCID-X1. This gene therapy trial is the first to have succeeded. Still, one does not know if the production of T and NK
cells will continue. Patients have been observed, in whom a spontaneous mutation of the $\gamma c$ gene resulted in a functioning gene (a reverse mutation happened). The observation of these patients points towards the production of T and NK cells continuing. On the other hand, it has been seen that the expression of foreign genes, regulated by virus LTR regions, can be silenced in T cells. Silencing sequences have been found in retrovirus LTR, so the possibility exists that this will happen, but a downward adjustment of the expression of the $\gamma c$ gene has not been observed in the two patients.

One might wonder why this gene therapy trial succeeded, when the trial to treat patients suffering from ADA deficiency did not succeed. It is thought that it could be because the $\gamma c$ gene transference resulted in a selective advantage for the transformed lymphocyte preliminary cells, as the $\gamma c$ cytokine receptor sub-unit plays a part in the transferral of survival and differentiation signals to these cells. In the trial with ADA it is thought, as aforementioned, that the transferred ADA analogues (PEG-ADA) have counteracted the potential growth advantage that the transformed cells had.

6. 1. 5. Optimism Regarding Researching into Gene Therapy

After completion of the Humane Genome Project in the year 2001, a strengthened effort has taken place to uncover the mechanisms that control gene expression. A lot of research is being done to find out which genes are responsible for the development of cancer. Cancer is in many cases thought to arise from multiple genetic events that in turn produce an irreversible malignancy. Leukaemia is a group of disorders that mostly include chromosomal rearrangements either leading to expression of otherwise quiescent oncogenes or the expression of fusion oncogenes. Furthermore the incorporation of retroviruses in specific regions of the genome consisting of proto-oncogenes or tumorsuppressor genes can cause specific forms of cancer.

The discovery of a new level of gene regulation termed RNA interference (RNAi) has caused new optimism in connection with human gene therapy and cancer (most gene therapy protocols are connected with the aim to cure cancer (see appendix C)). The hope is that it will be

---

27 A well-studied example of the expression of fusion oncogenes are the rearrangements occurring in many patients suffering from the haematopoietic malignancy acute promyelocytic leukaemia (APL) [H. de The et al., Cell, No. 66, 1991, pp. 675-684. A. D. Goddard et al., Science, No. 254, 1991, pp. 1371-1374].
possible to ‘knock down’ the expression of damaging oncogenes by the use of this gene si-lencing approach, i.e. the method is a form of the aforementioned blocking therapy (see sec-
tion 6.1.2.). Since 2001 this technology has proven its strength in laboratory systems. I am a
member of a research group at the University of Aarhus, who believe that we can play an
active role in the treatment of cancer with gene therapy by the RNAi method.

RNA Interference

RNA interference (RNAi) is a term describing the specific suppression of genes by a process
whereby double stranded RNA (dsRNA) induces homology dependent degradation of cognate
mRNA. Although the mechanism by which dsRNA suppresses gene expression is not en-
tirely understood, experimental data provide important insights. In non-mammalian systems
such as fruit flies it appears that longer dsRNA is processed into 21-23 nucleotides dsRNA
called small interfering RNA (siRNA) from longer dsRNAs by the ribonuclease enzyme
Dicer. The siRNAs serve as guide-sequences that instruct an associated multicomponent
nuclease enzyme called RISC to destroy specific mRNAs. The siRNAs that serve as guide-
sequences have a complementary sequence to the mRNAs, which are broken down.

RNAi and related phenomena represent evolutionarily conserved mechanisms that protect
organisms from invasion by both exogenous viruses and endogenous mobile genetic elements,
which have double stranded RNA as an intermediate product. By this defence-mechanism the
organisms can maintain genetic integrity. Furthermore RNAi regulates gene expression in
connection with development in for instance worms. The use of siRNAs to ‘knock down’
specific genes in worms and flies has been a powerful tool to study gene function in these
organisms. But until recently the method has not been usable in mammalian systems. The
problem is that mammalian cells have a potent anti viral response pathway that induces global
changes in gene expression when dsRNA longer than 30 nucleotides are introduced into cells.

This anti viral response leads to cell death (apoptosis)\textsuperscript{35}. The discovery that chemically synthesised 21 nucleotide duplexes of siRNA effectively suppress gene expression in cultured human cells without causing apoptosis leads to new promises for siRNA to block the expression of for example oncogenes in humans\textsuperscript{6}.

From a therapeutic point of view RNAi is a promising method because it silences genes very specifically and efficiently. The target recognition by the siRNA is highly sequence-specific since introduction of a single mismatch within the siRNA inactivates gene ‘knock down’\textsuperscript{37}. As we mentioned, the use of synthetic 21-nucleotide siRNA mediates strong and specific suppression of gene expression. However, this reduction in gene expression is transient, which severely restricts its application. Recently researchers have designed a mammalian expression vector that directs the synthesis of siRNA transcripts, which means that siRNAs are reproduced over longer periods of time. Importantly, stable expression of siRNA using this vector mediates persistent suppression of gene expression, which benefits its application\textsuperscript{38}.

In connection with the treatment of cancer with siRNA, the target sequence for a siRNA is among others 19 nucleotides complementary to the damaging oncogene. To choose the 19 complementary nucleotides an appropriate genome database is recorded and compared to eliminate any sequences with significant homology to other genes. Those sequences that appear to be specific to the gene of interest (the damaging oncogene) are the potential siRNA target site. By targeting the unique part of the gene of interest the siRNAs will not interfere with normal functions of cellular genes. The combination of an extreme specificity and efficiency in gene silencing makes the usage of siRNA in cancer therapeutic protocols very promising. The aim of the research program at the University of Aarhus is to incorporate a siRNA complementary to a damaging oncogene into a retroviral vector. After that we will initiate siRNA therapy in transgenic mouse models, which have incorporated the genetic rearrangements that leads to cancer in their genome. Hopefully in the long run the method of siRNA will become a treatment of human cancer.

\textsuperscript{36} S. M. Elbashir et al., 2001\textsuperscript{b}, \textit{op.cit.}, pp. 494-498. G. Huttunen, \textit{op.cit.}, pp. 834-838.
\textsuperscript{38} T. R. Brummelkamp et al., \textit{op.cit.}. 
6.1.6. Gene Therapy Seen in Relation to Traditional Forms of Treatment

In the aforementioned, in relation to research into somatic gene therapy two success stories have been described (the treatment of ADA deficiency and SCID-X1). These are examples of gene therapy in which a foreign gene was introduced encoding an enzyme the patient had been unable to produce, i.e. addition therapy. As a summery, an evaluation will follow of the application of addition therapy by retroviral vectors in comparison with the traditional forms of treatment in usage today. The reason that we will look at addition therapy mediated by retroviral vectors in comparison with traditional forms of treatment is that this is the only form of gene therapy that has cured patients completely. Addition therapy has the disadvantage of risking the patient’s immune defences attacking the foreign proteins, which therefore break down. By applying a retroviral vector the risk is that the proviral DNA disturbs the expression of important genes, for example the activation of proto-oncogenes or the inactivation of tumour-suppressor genes, in both cases potentially changing the cell into a cancer cell. The risk of this is rather minute though, as around 90% of the human genome consists of non-coding regions. There is also the risk that virus LTR regions contain silencing sequences resulting in a lessening of the transgenes. If this occurs the gene therapy can be applied again. As we mentioned, the effectiveness of the second treatment could be relatively low because of reproduction of antibodies. Another disadvantage in using retroviral vectors is the very low risk of recombination with unknown virus-DNA sequences, whereby the vectors could turn infectious. An alternative to gene therapy could be replacement therapy with proteins. The enzyme the somatic cells cannot produce could be replaced with artificially produced enzyme injected at intervals. This could though, as with the addition therapy, result in immunological reactions. The patient could also have a bone marrow transplant the disadvantage being that it is very difficult to find a perfect suitably donor. In addition one runs the risk of immunological reactions by this treatment. In treatment of SCID-X1, bone marrow transplantation cannot cure patients with defective B cells, i.e. bone marrow transplantation doesn’t always cure even if the bone marrow is not rejected. Of course there can be other advantages and disadvantages both to gene therapy and to traditional forms of treatment we have not mentioned here. But from the above-mentioned observations one may conclude that the only disadvantages to gene therapy not to be found in ordinary forms of treatment is that the retrovirus could incorporate itself unfavourably in the cell’s genome, and the risk of recombination. Furthermore, traditional forms of treatment have some disadvantages gene therapy does not have. To avoid the aforementioned risk one could use retroviral vectors, if the gene therapy is applied in vitro, i.e. the cells are transformed outside the body. Then one can leave off restoring cells, where the
transformation has failed. Seen purely from a scientific perspective, gene therapy could be a good competitor to traditional forms of treatment in use today. The question is which ethical complications gene therapy may result in.

6. 2. Ethical Assessment of Somatic Gene Therapy

In the following we will make an ethical assessment of somatic gene therapy by use of Beauchamp and Childress’ four bioethical principles.

We take our starting point in practice that is in the actual case to evaluate. The question is which ethical problems are connected to the use of gene therapy on somatic cells. In my opinion, we have to consider the following problems:

1) Genetic enhancement.
Is it ethically acceptable to use somatic gene therapy to enhance normal characteristics, such as for example intelligence? Who should be offered the treatment? Is it wrong in itself to perform gene therapy to improve normal characteristics?

2) The slippery slope.
If we allow the use of one kind of genetic manipulation, are we then on a slippery slope? Is it possible to stop other forms of genetic manipulation being realised? For instance, when we have allowed the usage of somatic gene therapy for the treatment of disease, could that lead to the use of gene therapy to enhance normal characteristics? Today, it is legal to perform gene therapy on somatic cells, could that lead to gene therapy on germ line cells?

3) An analysis of risk.
How much harm and how much well-being are connected to the performance of somatic gene therapy?

In what follows we will show how to use the four bioethical principles to evaluate the above-mentioned ethical problems. We will see that an application of the ethical principles on a concrete problem is a process, i.e. that the use of the principles results in critical analysis of the principles and perhaps a reformulation of the same.
Genetic Enhancement

In the case of the introduction of somatic gene therapy, there could be ethical considerations that mean that one wishes to use gene therapy as treatment for disease because it furthers the good of human beings. On the other hand, it could be that one would not allow gene therapy applied to somatic cells to improve normal characteristics. One could evaluate the case by the principle of justice. If it is possible to improve normal characteristics by somatic gene therapy, who should be offered the treatment? Should it be those who can afford it? As we mentioned, in the Nordic countries there is a prevalent rule concerning the just distribution of goods in society, in which, for example, all should have equal access to health services. David B. Resnik writes the following:

“…opponents have argued that enhancement is wrong because it would exacerbate existing social (economic and political) inequalities because enhancements would only be available to those who can afford them. Those who can afford enhancements will have enhanced children, who will purchase more enhancements, and the gap between the rich and poor would widen.”

The introduction of somatic gene therapy to enhance normal characteristics could then be rejected on the grounds of the principle of just distribution of goods in society. One must be aware, though; that one can only guess what effect biotechnology will have on the society of the future. It could be maintained that the principle of justice conflicts with the principle of beneficence, because, for example, the people who have their intellectual capacity improved might have a better life. In such a case I think that the principle of justice weighs heaviest, because of the above-mentioned argument. According to the principle of justice one could argue that somatic gene therapy should only be introduced as treatment for disease.

I think there is yet another ethical problem connected to the usage of gene therapy to enhance normal characteristics. This problem is independent of the principle of justice. I have an intuitive impression that it is wrong in itself to improve human beings. Human dignity is offended by performing gene therapy to enhance normal characteristics. It is difficult to set forth a secular argument in favour of human dignity. My argument will be in continuation of a secular interpretation of Løgstrup’s ethics. One can say that human dignity is given along with life itself; therefore one can have an intuitive impression that it is wrong in itself to enhance normal characteristics by gene therapy. A religious argument could be that the human being as
The Ethics of Gene Therapy – an Application of the Four Bioethical Principles

created in the image of God has a worth, which may not be offended. The ethical problem concerning genetic enhancement shows that an ethical assessment of a method within biomedicine is a process, which can cause a reformulation of the ethical principles presented by Beauchamp and Childress (this kind of reformulation of principles is also the case in Rawls theory of justice). By this ethical assessment of gene therapy and genetic enhancement I am able to argue that the principle of respect for autonomy must be supplemented by a principle of human dignity (see section 4.5.2.1.). Thus we have presented two arguments in favour of performing gene therapy for the treatment of disease and not for the enhancement of normal characteristics. Today, it is legal to use gene therapy on somatic cells for the treatment of disease. Are we on a slippery slope?

The Slippery Slope

Certain arguments are often put forward in discussions as to whether somatic gene therapy is an ethically acceptable technology. One of them is the ‘slippery slope’ argument that if one has first used one kind of genetic manipulation, then it is impossible to stop other forms being realised. It could, for example, be that one finds somatic gene therapy morally acceptable as a treatment of disease and therefore allows its application. It is maintained that if one first has allowed the usage of somatic gene therapy as a treatment for disease, then, for example, one cannot prevent the introduction of somatic gene therapy as an improvement of normal characteristics. The thought is that one cannot maintain the distinction because one is on a slippery slope as soon as one form of genetic manipulation has been allowed. The ‘slippery slope argument’ rests on a prediction of which ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have. To evaluate the ‘slippery slope argument’ against the application of somatic gene therapy it is necessary to examine the probability that ethically unacceptable consequences the administration of a certain practice will have.

As in the future it may be possible to improve normal characteristics by gene therapy, it is necessary to be able to set a limit to the application of this technique, because of the above-mentioned ethical considerations concerning genetic enhancement. Bernard Williams\(^{44}\) thinks that it is difficult to avoid the slippery slope if one sets limits to the introduction of a practice by help of a concept, which isn’t well defined\(^{45}\). To set a limit to the application of somatic gene therapy in treatment of disease the concept of disease must be defined as precisely as possible. If the concept of disease can be defined the slippery slope might be avoided. The line between sick and healthy is difficult to draw; the concept of disease is often up for discussion. Unfortunately we cannot go into details concerning the various viewpoints on the concept of disease. I take it that it is reasonable to use Caroline Whitbeck’s\(^6\) definition of disease because it is dependent on the social context and takes its starting point in the individual. Whitbeck defines disease as psycho physiological processes, which 1) prevent the human being doing that which (s)he normally does, 2) prevents the human being doing that which (s)he expects herself/himself to be able to do and 3) could be statistically abnormal\(^{47}\).

So, Whitbeck views health as having a capacity for action that makes the individual able to reach her/his goals. If these goals are realistic, then there should not be any argument that the definition cannot be used to set a limit for the application of somatic gene therapy. Then the question is whether Whitbeck’s definition of disease is precise enough to prevent the slippery slope. In order to have an idea of this one could look at whether the protocols for gene therapy today are aimed towards the treatment of conditions included in the definition. This is the case (see appendix C). In the USA a limit for the application of somatic gene therapy has been set which is very similar to the one mentioned. French Anderson\(^{48}\) write: “The Human Gene Therapy Subcommittee of NIH’s\(^{49}\) Recombinant DNA Advisory Committee has already established a de facto line …. proposals for deliberate germ line alteration will not be considered; protocols for somatic cell gene therapy must justify why the disease selected is a good candidate, including the seriousness of the disease and the lack of effective alternative therapy\(^{50}\).

\(^{44}\) Bernard Williams: Professor of Philosophy, University of California, USA.
\(^{45}\) Bernard Williams, op.cit., pp. 135-137.
\(^{46}\) Caroline Whitbeck: Professor of Ethics, Case Western Reserve University, USA.
\(^{48}\) French Anderson: Director of Gene Therapy Laboratories and Professor of Biochemistry and Pediatrics, University of Southern California School of Medicine, USA.
\(^{49}\) The National Institutes of Health.
The belief in a definite line depends on the trust that society will maintain such a limit by regulation and statutory instruments. In this connection the establishment of The Council of Ethics in 1987 plays an important role in Denmark. This council advises the Minister for Health, Parliament’s committee concerning The Council of Ethics, and health authorities about ethical circumstances in relation to new biomedical research.51

One could imagine that it would become possible to prevent disease with somatic gene therapy. One could almost compare it to a vaccine. In such a situation physicians must be able to predict that a condition belonging under Whitbeck’s definition of disease might possibly break out if gene therapy were not applied. What about borderline cases such as for example involuntary childlessness that we normally do not characterise as disease? If one could ‘cure’ involuntary childlessness by gene therapy, should the person then be ‘treated’ by gene therapy? My answer would be ‘yes’ if the person is in a condition, which is included in Whitbeck’s definition.

If it is only conditions in accordance with Whitbeck’s definition of disease that must receive treatment with somatic gene therapy, then one has some guidance as to which patients to offer this form of treatment and which not. This can help to ensure a just selection of patients.

When analysing the slippery slope argument there is one more ethical problem to evaluate. Today it is legal to perform gene therapy on somatic cells, could that lead to gene therapy on germ line cells? First we have to consider whether it is ethical acceptable to perform gene therapy on germ line cells. From an ethical point of view, what is the argument that we should allow gene therapy on somatic cells and not on germ line cells? As somatic cells do not pass on genetic information to the next generation, gene therapy on somatic cells only affects the subject treated. The application of somatic gene therapy in this connection does not conflict with the principle of respect for autonomy. All humans have a right to decide their own lives and so decide for themselves if they want to receive somatic gene therapy treatment. Furthermore, one must ensure that patients are informed about what somatic gene therapy is and which alternative forms of treatment exist before they freely consent to participate in a trial with somatic gene therapy. As we mentioned, by performing gene therapy on germ line cells the genes introduced into the cells can be passed on to following generations. In this way one makes some decisions for the next generations the consequences of which one does not know

51 Danish Council of Ethics, (Etisk Råd), http://www.etiskraad.dk, April 7th, 2002.
The Ethics of Gene Therapy – an Application of the Four Bioethical Principles

(see section 6. 1.). Therefore to use gene therapy on germ line cells offends the principle of respecting autonomy. Does this technique also conflict with the principle of human dignity? In this connection, I think Jürgen Habermas has an interesting theory. According to Habermas, if another person changes a person’s genetic makeup, the interpersonal relationship would change into a designer – product relationship. Habermas thinks it belongs to a modern understanding of free agency that the conditions for developing personal identity are out of control for others. Habermas applied this theory on human cloning. I think he would find a difference between influencing another person’s genetic makeup by use of gene therapy as treatment of disease and determining the total genetic makeup of a person as one does by human cloning.

Anyway, one can use some of Habermas’ considerations in connection with gene therapy on germ line cells. I interpret Habermas’ theory in the following way: If one uses gene therapy on germ line cells and thereby changes a person’s genetic makeup, if the change is very radical the conditions for developing personal identity are in control by others, thus free agency is questioned. One could say that by use of gene therapy on germ line cells the interpersonal relationship would change into a designer – product relationship. I think this is in conflict with the principle of human dignity. Thereby we have presented yet another argument in favour of supplementing the principle of respect for autonomy with a principle of human dignity.

However, as with the slippery slope argument against genetic enhancement one has to examine the probability that the ethical unacceptable consequences will set in. One can almost use the same techniques to perform gene therapy on germ line cells as to somatic cells. These techniques we have developed already. The difference between somatic cells and germ line cells is not difficult to verify by scientific methods. Thus we do not have the same problem of defining a vague concept as we have in connection with the concept of disease. I think that means that we can avoid the slippery slope. But again, the belief in a definite line depends on the trust that society will maintain such a limit by regulation and statutory instruments.

An Analysis of Risk

When making an ethical assessment of gene therapy on somatic cells, it is important to analyse how much harm and how much well-being this technique causes. This is in agreement with Beauchamp and Childress principle of beneficence. This principle consists of two elements. One element is the obligation actively to further the good and prevent and remove

---

52 Jürgen Habermas: German Philosopher and Sociologist.
pain. If somatic gene therapy is introduced in connection with treatment of disease it is in agreement with this obligation. The second element is the demand to look at how much an action furthers the good in certain conditions compared to how much harm it results in. Therefore, the principle of beneficence demands an analysis of risk in the application of somatic gene therapy. That was done in connection with an evaluation of the use of somatic gene therapy compared to traditional forms of treatment (see section 6. 1. 6.). The conclusion was that the risk involved in the application of somatic gene therapy could be avoided by doing cell transformation in vitro. In this way the use of somatic gene therapy as a treatment for disease furthers the good and is not in conflict with the principle of nonmaleficence. In Denmark, all clinical trials with gene therapy must be approved before commencing by The Scientific Ethical Committee. The committee can reject a research project if it involves unacceptable risk for the persons involved in the trial. That the committee can reject a research project if it involves unacceptable risks leads us to another ethical question: Who decides what ‘unacceptable risks’ are? It could be the patient or the physician. As we mentioned, in Denmark it is The Scientific Ethical Committee. That is, the principle of nonmaleficence is given more weight than the principle of respect for autonomy. For example if a patient is very sick and in the risk of dying, maybe (s)he will expose herself/himself to much risk if there is a little chance that the treatment will help. In Denmark there is a limit to the risk that patients must be exposed to. I find it reassuring that The Scientific Ethical Committee must approve clinical trials, because the committee both have a technical and an ethical knowledge, which the patient maybe do not have. I do not see that as limiting the patient’s autonomy, rather as a protection of the patient. Unfortunately we cannot go into more detail on this topic.

**Reformulation of the Bioethical Principles**

From these considerations one can argue that the introduction of somatic gene therapy as treatment of disease furthers the good of humans and that the introduction of this form of treatment does not contradict Beauchamp and Childress’ four bioethical principles. An objection could be that the bioethical principles only concern themselves with human beings’ duties to other humans and the duties of the state to the individual with respect to a just distribution of goods in society. Elements that concern humans’ obligations to animals are not mentioned.

---

54 Danish Council of Ethics, (Etisk Råd), [http://www.etiskraad.dk](http://www.etiskraad.dk), April 7th, 2002.
55 As an example one can mention the gene therapy project for the treatment of cancer at Århus Kommunehospita1 in 1999, which caused a huge debate. It was maintained that the adenoviral vectors were not quality controlled and that the patients did not consent to participate in the project [Faculty of Health Sciences and The County of Århus’ statement of the virus and gene therapy project at Århus Kommunehospital. September 6th, 1999. (Det
In the discussion concerning ethical problems in connection with biotechnology humans’ duty to animals is important. Biotechnologists are testing new methods on research animals. The question is what moral responsibility human beings have to these animals. Unfortunately we cannot present an in-depth discussion of animal welfare, the aim being to point to a possible lack in Beauchamp and Childress’ bioethical principles. One could let consideration for the suffering of beings be a part of Beauchamp and Childress’ principle about not harming others. Then it would be a principle about not harming beings with the ability to suffer. This principle is a prima facie principle just like the other bioethical principles, and would have to be evaluated equally in relation to them. As the principle is only prima facie binding, the introduction of such a principle, for example, would not result in trials on animals being forbidden in all situations. One must consider how much the testing of new biotechnological methods on animals furthers the good of human beings, i.e. to set the principle about not harming other beings that are able to suffer against the principle of beneficence. It makes no sense to use the principle of respect for autonomy and the principle of justice in connection with animal welfare, because animals do not have reason and are not part of the human society in which goods and burdens are to be just distributed. Therefore with respect to animal ethics, the bioethical principles are reduced to the principle of beneficence and the principle of not harming beings that have the ability to suffer. This elaboration corresponds to classical utilitarianism, which only considers the happiness and pain of the being. Some animal ethicists point out that important aspects of animal welfare are not covered if one uses utilitarian theory. Integrity ethicists point out that, for example, a species as defined by its genetic makeup, is something to be respected. They feel unease about the development of transgenic animals, and they think it is something that is in itself bad.\footnote{See for example M. Fox, Transgenic Animals: Ethical and Animal Welfare Concerns. In The Bio-Revolution: Cornucopia or Pandora’s Box? (edited by P. Wheale & R. McNally), London: Pluto Press, 1990, pp. 31-45.} As mentioned in the section on RNA interference and cancer (section 6. 1. 7.), transgenic mice are, among others, used in connection with research into somatic gene therapy. As it is very serious diseases under research in connection with research into gene therapy (see appendix C) I think that the consideration to further the good of humans weighs heavier than consideration for the suffering and integrity of animals. So, even if Beauchamp and Childress’ principle of nonmaleficence is expanded to include all beings capable of suffering and is also supplemented with a form of integrity ethics in relation to animal welfare, I argue that somatic gene therapy as a treatment of disease is both technically and ethically justifiable as a method.
As we mentioned, one could also object that the principle of autonomy is not enough for the protection of human beings. The principle of respect for autonomy must be supplemented by a principle about respect for human dignity.

Yet, objections could also be made that the bioethical principles do not say anything about that in which the good life consists, i.e. the bioethical principles do not tell us what fundamentally must be taken into account in weighing up the principles. I think that Beauchamp and Childress have deliberately not supplemented the bioethical principles with a theory about the good life, because this could result in the principles not being applied cross-culturally, as how one defines the good life in different cultures varies. It will not be possible to deepen the theory about the good life in this thesis, but it has appeared implicitly that I think the good life consists in the absence of disease both mental and physical, the possibility for activity, intellectual challenges and sociability. I think that the basis must be that the individual human being thinks her/his life meaningful.

As has appeared Beauchamp and Childress’ bioethical principles are tools one may use to illuminate ethical problems raised by medical science and biotechnology. One must be aware that an evaluation according to these principles is not a final conclusion but a point for debate.
7. Bioethics – a Dialogue Between Professions

As has appeared, bioethics is an academic discipline. Its members come from different professional areas such as, for example, medicine, biology, law, philosophy, theology, and religious studies. The bioethicist Loretta Kopelman writes the following:

“How can something be one field and yet be so overwhelmingly interdisciplinary? Part of what usually marks something as one academic discipline is that members initially share a similar education …. we come from different academic homes, each with distinct languages, methods, traditions, core curriculum and competency examinations”. She continues that bioethicists “...focus upon humanities issues relating to health care and biology”.

Kopelman thinks that the role of bioethics is to advise politicians on how to make laws and statutory instruments concerning problems within these fields. She maintains that it demands an interdisciplinary approach to find justifiable solutions to the problems as an interdisciplinary approach helps one to see the problems in a broader perspective and lends a new view to them. Persons working with bioethics have understood that it is necessary to transcend their own academic disciplines and communicate across the limits of each discipline. Kopelman write: “In contrast, colleagues from our ‘home’ disciplines sometimes believe that good solutions to one or more of these problems can only be found deep within a single field”.

As we mentioned, she maintains that any discipline has its own traditions, methods and languages. I think this is seen both within biotechnology and within philosophy. The ethicist attempts to contribute to a collective critical reflection on cases within biotechnology. But there must be constructive communication between philosophers and molecular biologists to ensure the blossoming of critical reflection. Molecular biologists and philosophers work toward the common goal that research shall benefit human beings. Bioethics plays an important part in reaching this goal; it can help to increase communication between the two disciplines. Kopelman thinks that it is precisely this ability that makes bioethics into a distinct field. She writes:

“What unites our activities and makes us one field, I contend, is our commitment to (1) work on a set of defining problems about the human condition, many of which are momentous and urgent; (2) use interdisciplinary approaches to solve them; (3) employ cases and practical reasoning to understand problems and reach answers …. (5) find morally justifiable solutions, and (6) seek interdisciplinary and collaborative scholarship, service or teaching”.

---

2 Loretta M. Kopelman, op. cit., p. 359.
3 Loretta M. Kopelman, op. cit., p. 358.
Kopelman thinks it important to integrate bioethics as a part of the disciplines of biology and medicine, from students to professional scientist. This would enable the various disciplines to look at their research in a broader perspective, and it might ease communication across academic disciplines. I will end with Kopelman’s words:

“We have chosen to specialize in a distinctly and unapologetically interdisciplinary field, resisting the overwhelming trend in academics in this century to specialize and teach deep within one discipline.”

\[5\] Loretta M. Kopelman, op.cit., p. 364.
Appendix A

Protocols by continent

<table>
<thead>
<tr>
<th>Continent</th>
<th>Protocols</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>America</td>
<td>480</td>
<td>80</td>
</tr>
<tr>
<td>Europe</td>
<td>103</td>
<td>17.2</td>
</tr>
<tr>
<td>Asia</td>
<td>9</td>
<td>1.5</td>
</tr>
<tr>
<td>Australia</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Africa</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Multi-continent</td>
<td>4</td>
<td>0.7</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100</td>
</tr>
</tbody>
</table>

Patients by continent

<table>
<thead>
<tr>
<th>Continent</th>
<th>Protocols</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>America</td>
<td>2208</td>
<td>63.7</td>
</tr>
<tr>
<td>Europe</td>
<td>928</td>
<td>25.9</td>
</tr>
<tr>
<td>Asia</td>
<td>32</td>
<td>0.9</td>
</tr>
<tr>
<td>Australia</td>
<td>13</td>
<td>0.4</td>
</tr>
<tr>
<td>Africa</td>
<td>15</td>
<td>0.4</td>
</tr>
<tr>
<td>Multi-continent</td>
<td>298</td>
<td>8.6</td>
</tr>
<tr>
<td>Total</td>
<td>3494</td>
<td>100</td>
</tr>
</tbody>
</table>

Appendix A. Gene therapy clinical trials: Protocols by continent and patients by continent (last updated September, 2001).

1 The Journal of Gene Medicine, [http://www.wiley.co.uk/genetherapy](http://www.wiley.co.uk/genetherapy), May 15th, 2002.
## Appendix B

### Protocols by vector

<table>
<thead>
<tr>
<th>Vector</th>
<th>Protocols</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Adeno-associated virus</td>
<td>13</td>
<td>2.2</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>164</td>
<td>27.3</td>
</tr>
<tr>
<td>Gene gun</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td>Herpes simplex virus</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Lipofection</td>
<td>77</td>
<td>12.8</td>
</tr>
<tr>
<td>Naked/plasmid DNA</td>
<td>59</td>
<td>9.8</td>
</tr>
<tr>
<td>Pox virus</td>
<td>37</td>
<td>6.2</td>
</tr>
<tr>
<td>Retrovirus</td>
<td>212</td>
<td>35.3</td>
</tr>
<tr>
<td>RNA transfer</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td>N/C</td>
<td>22</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100</td>
</tr>
</tbody>
</table>

### Patients by vector

<table>
<thead>
<tr>
<th>Vector</th>
<th>Protocols</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>%</td>
<td>Number</td>
</tr>
<tr>
<td>Adeno-associated virus</td>
<td>13</td>
<td>2.2</td>
</tr>
<tr>
<td>Adenovirus</td>
<td>164</td>
<td>27.3</td>
</tr>
<tr>
<td>Gene gun</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td>Herpes simplex virus</td>
<td>3</td>
<td>0.5</td>
</tr>
<tr>
<td>Lipofection</td>
<td>77</td>
<td>12.8</td>
</tr>
<tr>
<td>Naked/plasmid DNA</td>
<td>59</td>
<td>9.8</td>
</tr>
<tr>
<td>Pox virus</td>
<td>37</td>
<td>6.2</td>
</tr>
<tr>
<td>Retrovirus</td>
<td>212</td>
<td>35.3</td>
</tr>
<tr>
<td>RNA transfer</td>
<td>5</td>
<td>0.8</td>
</tr>
<tr>
<td>N/C</td>
<td>22</td>
<td>3.8</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100</td>
</tr>
</tbody>
</table>

---

1 The Journal of Gene Medicine, [http://www.wiley.co.uk/genetherapy](http://www.wiley.co.uk/genetherapy), May 15th, 2002.
Appendix C

Protocols by disease

Patients by disease

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Protocols</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>%</td>
</tr>
<tr>
<td>Cancer</td>
<td>378</td>
<td>63%</td>
</tr>
<tr>
<td>Monogenic diseases</td>
<td>75</td>
<td>12.5%</td>
</tr>
<tr>
<td>Infectious diseases</td>
<td>38</td>
<td>6.3%</td>
</tr>
<tr>
<td>Vascular diseases</td>
<td>48</td>
<td>8%</td>
</tr>
<tr>
<td>Other diseases</td>
<td>11</td>
<td>1.8%</td>
</tr>
<tr>
<td>Genemarking</td>
<td>48</td>
<td>8%</td>
</tr>
<tr>
<td>Healthy volunteers</td>
<td>2</td>
<td>0.3%</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
<td>100%</td>
</tr>
</tbody>
</table>

Appendix C. Gene therapy clinical trials: Protocols by disease and patients by disease (last updated September, 2001)

1 The Journal of Gene Medicine, [http://www.wiley.co.uk/genetherapy](http://www.wiley.co.uk/genetherapy), May 15th, 2002.
References

Andersen, Svend; Determinism or Meaninglessness. The Philosophical Challenge of Science in Kant and Løgstrup, in Free Will and Determinism, (edited by Viggo Mortensen), Aarhus: Aarhus University Press, 1987, (pp. 100-116).
Andersen, Svend; Bioetik i luthersk belysning, Dansk Teologisk Tidsskrift, Vol. 57, No. 2, 1994, (pp. 133-152).
Andersen, Svend; Løgstrup, Denmark: Forlaget ANIS, 1995b.
Andersen, Svend; Som dig selv. En indføring i etik, Aarhus: Aarhus Universitetsforlag, 1998a.
Andersen, Svend & Jensen, Karsten Klint; Bioetik, Denmark: Rosinante Forlag a/s, 1999.
Andersen, Svend; The Right to a Good Death, the paper is in press and will be included in a work published by the Nordic Ecumenical Council.


Danish Council of Ethics, (Etisk Råd), [http://www.etiskraad.dk](http://www.etiskraad.dk), April 7th, 2002.


Ebbesen, Mette; Det syge og det sunde, Dagbladet Information, December 27th, 2000.


Faculty of Health Sciences and The County of Århus’ statement of the virus and gene therapy project at Århus Kommunehospital, September 6th, 1999. (Det Sundhedsvidenskabelige Fakultet og Århus Amts redegørelse vedrørende virus- og genterapi på Århus Kommunehospital. Sammenfattende konklusion. 6. September, 1999).


Fink, Hans; Moralbegrundelse og logik. Et indlæg i diskussionen om den naturalistiske fejlslutning, Copenhagen: Nordisk Forlag A/S, 1970.


Fletcher, Joseph; Principles of Biomedical Ethics, in Theology Today, Vol. 36, No. 4, 1980.


Hare, R. M.; Euthanasia: A Christian View, in Proceedings of the Centre for Philosophic Exchange, No. 6, 1975, (pp. 43-52).
Holm, Soeren; Not just Autonomy - The Principles of American Biomedical Ethics, in the Journal of Medical Ethics, Vol. 21, No. 6, (pp. 332-338), 1995.
Holm, Soeren; Ethical Problems in Clinical Practice - A Study of the Ethical Reasoning of Health Care Professionals, Ph.D. Thesis, Department of Medical Philosophy and Clinical Theory, University of Copenhagen, 1996.
Kane, Robert; Through the Moral Maze, Searching for Absolute Values in a Pluralistic World, USA: M. E. Sharpe, 1996.
Lund, Erik et al. (editor); De europæiske ideers historie, Copenhagen: Nordisk Forlag A. S., 1995.


Mortensen, Viggo; Genetik og gen-etik, in Dansk Kirketidende, No. 136, (pp. 4-9), 1984.

Mortensen, Viggo; Free Will, Determinism and Responsibility, in Free Will and Determinism, (edited by Viggo Mortensen), Aarhus: Aarhus University Press, 1987, (pp. 201-208).

Mortensen, Viggo; Gør livet fri. Om skaberværkets ukønkelighed, Denmark: The Ecumenical Council of Denmark, 1990.


Norman, Daniels; Wide Reflective Equilibrium and Theory Acceptance in Ethics, Journal of Philosophy, No. 76, 1979, (pp. 257-282).


Rendtorff, Jacob Dahl & Kemp, Peter; Basic Ethical Principles in European Bioethics and Biolaw, Vol. I: Autonomy, Dignity, Integrity and Vulnerability, Denmark: Centre for Ethics and Law (Copenhagen), 2000.


Sartre, Jean-Paul; Eksistentialisme er en humanisme, Copenhagen: Hans Reitzels Forlag, 1997.


Sørensen, Annette Balle; Journal of Virology, Vol. 74, No. 5, 2000, (pp. 2161-2168).


Williams, Bernard; Which Slopes are Slippery? in Moral Dilemmas in Modern Medicine (edited by Peter Singer), Oxford: Oxford University Press, 1985, (pp. 126-134).


